Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



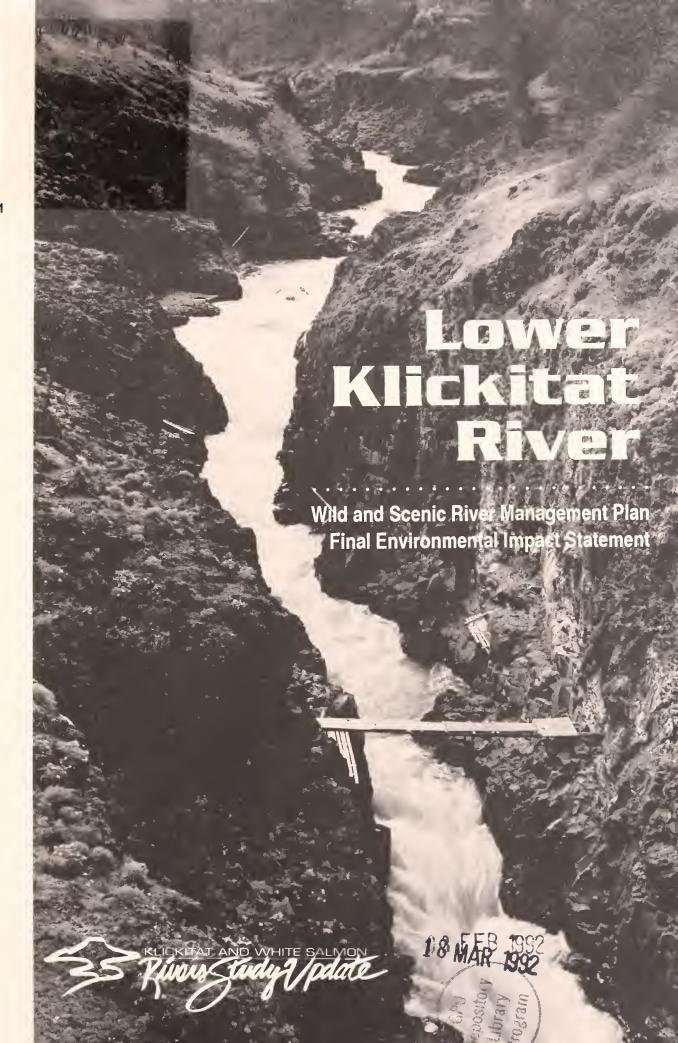
U Reserve A aQH76

.9 W2U541 1991

Pi N Region

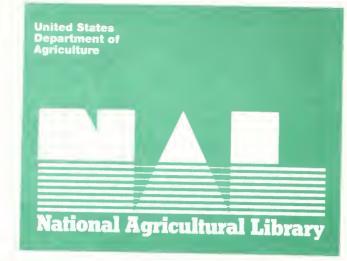
November, 1991





Acronyms and A

AUM Anim **CFS** Cubi Colu **CRGNSA** Was DNR DOE Was Was DOT EIS Envi FFMA Fed



FERC Fedural Energy

FR Federal Register

GPNF Gifford Pinchot National Forest HCA Habitat Conservation Area HPA Hydraulic project approval

IAC Interagency Committee for Outdoor Recreation

KWA Klickitat Wildlife Area

LEIS Legislative Environmental Impact Statement

MBF Thousand board feet
MMBF Million board feet

NEPA National Environmental Policy Act NPPC Northwest Power Planning Council

PILT Payment in lieu of taxes

PL Public Law

RCW Revised Code of Washington

RM River mile

ROS Recreation Opportunity Spectrum

ROW Right-of-way

RVD Recreation visitor-day
SCS Soil Conservation Service
SDS SDS Lumber Company

SEPA Washington State Environmental Policy Act

SMP Shorelines Master Plan
SOHA Spotted Owl Habitat Area
T/F/W Timber, Fish and Wildlife
T&E Threatened and Endangered

USC United States Code

USGS United States Geological Survey

VQO Visual quality objective

WDF Washington Department of Fisheries
WDW Washington Department of Wildlife
WNHP Washington Natural Heritage Program



Lower Klickitat River

Wild and Scenic River Management Plan Final Environmental Impact Statement



Lead Agency:

U.S.D.A. Forest Service

Columbia River Gorge National Scenic Area

902 Wasco Avenue Hood River, OR 97031

Responsible Official:

Arthur J. Carroll

Manager, Columbia River Gorge National Scenic Area

For Further Information Contact:

Steve Mellor

U.S.D.A. Forest Service

Columbia River Gorge National Scenic Area

902 Wasco Avenue Hood River, OR 97031

(503)-386-2333

Abstract

The Forest Service, in compliance with the National Environmental Policy Act of 1969, is presenting four alternative ways of managing the 10.8-mile long portion of the Klickitat river from Wheeler Canyon near Pitt, Washington down to the river's confluence with the Columbia. The lower Klickitat was added to the National Wild and Scenic Rivers System in 1986, classified as a Recreation river segment.

A Draft EIS was released in July, 1990. This Final EIS and management plan was prepared in response to comments received on the Draft including written comments and verbal comments received at a public meeting held in Lyle, Washington on September 5, 1990. The project Task Force also met on two occasions during the comment period to discuss public comments and offer solutions to identified issues.

The alternatives are:

- 1. Manage the river using the county's Shorelines Master Plan and zoning ordinance, the state's regulation of forest and streambank practices, and, for the lower 1.5 miles of river, the provisions of the Columbia River Gorge National Scenic Area Act.
- 2. Manage the river by increasing enforcement of existing laws, coordinating recreation and other management activities, and encouraging landowners to conserve resources on private lands. The river from the mouth upstream to Summit Creek would be added to the State Scenic Rivers System. The State of Washington would coordinate river management activities.
- 3. Manage the river using increased county regulations supplemented by limited federal acquisition to maintain and in some cases enhance river resources and recreation opportunities. Management would be implemented by a committee composed of the Forest Service, Klickitat County, State of Washington, and Yakima Indian Nation.
- 4. Manage the river using a comprehensive program of federal acquisition to enhance river corridor resources and provide significantly more recreation opportunities, with management implemented by the U.S. Forest Service.

Alternative 1 is the "No Action" alternative describing the current management situation on the lower Klickitat. The Draft EIS did not include a preferred alternative. The Final EIS identifies Alternative 2 as the preferred alternative.

Table of Contents

sum	mary	
Manager Areas of Change Organiza	dy Issues ment Alternatives Controversy Between Draft and Final EIS ation of This Document of Alternatives on Key Study Issues	iiiiviv
Chap Purp	ter 1 ose and Need for Action	
1.1	Management Planning Process	1-2
1.2	Introduction to the Wild and Scenic Rivers Act	1-3
1.3	Public Involvement Program	1-3
	Public Meetings	1-3
	Task Force	1-4
	Interested Parties	1-4
	Newsletters	1-4
1.4	Outstanding Resource Analysis and Classification	1-5
1.5	Boundary Process	1-5
1.6	Change Between the Draft and Final EIS	1-6
_	ter 2 rnatives	
2.1	Key Study Issues	2-2
2.2	Alternatives Considered But Not in Detail	2-5
	Federal Designation of the "Middle Segment"	2-5
	State Scenic Designation for the Lower Klickitat Only	2-5
	Alternative 2 But Without State Scenic Designation	2-5
	Management Designed to Create Highly Developed Recreation Opportunities	2-5
2.3	Management Alternatives Considered in Detail	2-6
	Alternative 1	
	Alternative 2	
	Alternative 3	2-7

Alternative 42-9

2.4	Tabular Presentation of Alternatives	
2.5	Monitoring	2-24
	Introduction	2-24
	Land Management Activities	2-24
	Instream Resources	2-24
	Fish	2-24
	Vegetation and Wildlife	2-24
	Cultural Resources	2-24
	Recreation	2-25
	Visual Quality	2-25
Chap	iter 3	
_	cted Environment	
3.1	Regional Setting	3-2
3.2	History	3-3
3.3	Land Ownership Patterns	3-4
3.4	Land Uses	3-4
	Timber Harvest	3-4
	Grazing	3-4
	Residential Use	3-4
	River Access and Cultural Sites	3-5
	Transportation Routes	3-5
3.5	Land Use Controls and Regulations	3-5
	Zoning	3-6
	Columbia River Gorge National Scenic Area	3-6
	Shorelines Master Plan	3-6
	Floodplain Management Ordinance	3-7
	Building Code	3-8
	County Health Code	3-8
	Forest Practices Act	3-8
	State Hydraulic Code	3-9
	State Water Quality Standards	3-9
	Current Use Assessment	3-9
3.6	Socioeconomics	3-10
	Population	3-10
	Economy	3-11
3.7	Recreation Opportunities and Public Access	3-11
	Access and Facilities	3-13
	Use Patterns	3-13
	Safety	3-14
	Impacts of Recreation	3-15
3.8	Visual Resources	3-15
	Viewshed Analysis	3-15
	Riverscape Character and Quality	3-16
	Existing Management Practices Affecting Visual Resources	3-16

3.9	Native American Traditional Uses and Rights	3-16
	Traditional Uses	3-16
	Treaty Rights	3-17
	Protection of Sacred Areas	3-18
3.10	Archaeological and Historical Resources	3-18
	Prehistoric and Historic Indian Sites	3-18
	Historic Sites Relating to European Settlement	3-18
	Protection of Archaeological and Historic Resources	3-19
3.11	Geology and Soils	3-20
3.12	Fish and Instream Resources	3-21
	Streamflow	3-21
	Water Quality	3-22
	Anadromous and Resident Fish	3-22
3.13	Vegetation	3-23
	Plant Communities	3-23
	Sensitive, Threatened and Endangered Plants	3-24
3.14	Wildlife	
	Big Game	
	Other Species	3-26
	Sensitive, Threatened and Endangered Wildlife	
	Other Species of Concern	
	onmental Consequences	
4.1	Impacts to Residential Construction	
4.2	Impacts to Timber Harvest Activities	
4.3	Impacts to Agriculture and Grazing	
4.4	Impacts to Recreation Opportunities and Public Access	
4.5	Impacts to Visual Resources	
4.6	Impacts to Native American Traditional Uses and Archaeological and	
	Historical Resources	
4.7	Impacts to Geological Resources	
4.8	Impacts to Streamflow and Water Quality	
4.9	Impact to Anadromous and Resident Fish and Fisheries	
4.10	Impacts to Vegetation and Wildlife	
4.11	Impacts to Socioeconomics	
4.12	, , , , , , , , , , , , , , , , , , , ,	
	Adverse Environmental Effects That Cannot Be Avoided	
4.14		4-15
	Local Short-Term Uses of the Environment and the Maintenance and	
	Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity	4-15
	Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity	4-15
	Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity	4-15

References and Bibliography

List of Preparers & Draft El5 Mailing List

Maps

Maps located at end of Chapters 1 and 3

Map 1-1 Regional Location

Map 3-1 Land Ownership

Map 3-2 Land Use

Map 3-3 Land Use Controls

Map 3-4 Steep Slopes

Map 3-5 Recreation Sites and Viewshed

Map 3-6 New Boundaries, Preferred Alternative

Figures, Tables and Boxes

Figure 3-1 Sectional Diagram, RM 9	3-2
Figure 3-2 Sectional Diagram, Gorge Area	3-3
Figure 3-3 Average Monthly Discharge	3-21
Table 2-1 Description of Alternatives	
Table 3-1 Klickitat County Average Annual Employment	3-10
Table 3-2 Recreation Access and Use Sites	3-14
Table 3-3 Rare Plants	3-24
Table 3-4 Rare Plant Species Potentially Occurring	3-25
Box 2-1 Procedure for Adding the Lower Klickitat to the Washington State	
Scenic Rivers System	2-7
Box 2-2 Conservation Easements	2-8
Box 3-1 Columbia River Gorge National Scenic Area	3-7
Box 3-2 Recreation Opportunity Spectrum	3-12
Box 3-3 Whitewater Rating System	3-13
Box 3-4 Outstanding Resources: Native American Dip-Net Fishery	3-17
Box 3-5 Outstanding Resources: Geology	
Box 3-6 Outstanding Resources: Hydrology	
Box 3-7 Outstanding Resources: Anadromous and Resident Fish	

Appendix A Public Comments on the Draft EIS

Appendix B Management Plan

Photographs by:

Stewart Allen, Rex Crawford, Julie McQuary, Bob Ratcliffe, Gary Weiner, Jacqueline Moreau (Cover, 2-1, 3-17)



Summary



The Klickitat drops into the gorge near RM 2.5; the fish ladder is on the right bank. The Columbia Gorge is barely visible at upper right.

The Wild and Scenic Rivers Act requires that a management plan be developed for each component of the Wild and Scenic Rivers System. This document fulfills that requirement for the lower Klickitat River. It describes both a strategy for managing the lower Klickitat River and the process used to develop this strategy.

Through the Columbia River Gorge National Scenic Area Act of 1986 (PL 99-663), Congress amended the Wild and Scenic Rivers Act (PL 90-542) to add the lower Klickitat (the 10.8-mile segment from Wheeler Canyon down to the confluence with the Columbia) to the National Wild and Scenic Rivers System and classify it as a Recreational river segment.

The management plan for the lower Klickitat River was prepared as an environmental impact statement following procedures defined by the National Environmental Policy Act (NEPA; PL 91-190). Preparation of this EIS involved developing a reasonable range of alternative ways the river could be managed and evaluating the impacts of each alternative on the physical, biological, social, and economic features of the river corridor. As required by the Wild and Scenic Rivers Act, the preferred alternative also identifies boundaries for the corridor; boundaries delineate the area to be influenced by the management plan.

Comments provided during the public comment period served as the basis for selecting a preferred alternative. This Final EIS identifies a preferred alternative and contains more specific information on how, when, and by whom the actions called for in the preferred alternative will be implemented.

Because the river corridor contains only a negligible amount of federal land, an extensive public involvement program was developed to make sure that the management alternatives would consider the concerns of the people having a stake in how the river is managed. The public involvement program consisted of public

meetings, a study Task Force, mailings to interested parties, and study newsletters, as well as ongoing informal meetings with any party requesting them.

The Task Force served as an integral part of the planning process, helping to identify issues, determine the significance of river resources, and develop and refine management alternatives. Individual Task Force members also served as conduits to interest groups wishing to be kept informed about the study.

The Task Force, which also considered management issues on the upper Klickitat River and the White Salmon River, was composed of 24 representatives from a wide range of interests concerned about the future of the river including local residents, Native Americans, federal and state agencies, local government, recreation and environmental organizations, and industry.

Key Study Issues

Seven key issues guided the development and evaluation of lower Klickitat River management alternatives:

- 1. Long-term protection or enhancement of important instream and shoreline resources, including free-flowing character, water quality and quantity, and fish habitat;
- 2. Long-term protection or enhancement of important upland resources, including scenery, wildlife habitat, and vegetation;
- 3. Protection of Native American treaty rights, traditional resource uses, and cultural sites;
- 4. Provision of public access and recreation opportunities;
- Effects of resource protection actions on private property rights and the economic viability of existing and future resource uses, including timber harvest, agriculture, and grazing;
- 6. The level of county and state support for management and their willingness to be involved; and
- 7. Cost and barriers to implementation of required actions.

Management Alternatives

This Final EIS presents and analyzes four alternative ways of managing the lower Klickitat. Each is discussed briefly below.

Alternative 1. This is the "no-action" alternative required by NEPA. This alternative describes the existing situation—what mechanisms currently are available to protect important river resources. Adoption of this alternative would mean that the river management plan would not call for any new activities to be undertaken. The county, state, and federal governments and the Yakima Indian Nation would continue to exercise their existing authorities in the river corridor.

There are many existing laws, programs, and policies that apply to the river corridor. The county Shorelines Master Plan (SMP) and zoning ordinance and the state Forest Practices Act and Hydraulic Projects Approval process provide protection for resources in the river corridor. Another such mechanism is the Columbia Basin System Planning effort, designed to double salmon and steelhead production in the Columbia River and its sub-basins, including the Klickitat. As part of this process, the State of Washington and the Confederated Tribes and Bands of the Yakima Indian Nation have jointly developed a plan for the Klickitat River sub-basin.

Since 1986, the lower 1.5 miles of river corridor have been within the boundaries of the Columbia River Gorge National Scenic Area (CRGNSA), and therefore subject to its provisions. Public access is currently provided by the state, county, and those private landowners who allow recreational use; recreation facilities are minimal along the lower Klickitat.

The existing boundary is depicted on Map 3-1. That boundary includes 4,830 acres. Excluding the river channel, this translates to an average of 420 acres of land per river mile.

Alternative 2. (preferred) This is one of two alternatives derived through Task Force discussions. All of the existing mechanisms protecting corridor resources would continue, but would be augmented by increased enforcement of existing regulations and better coordination of river management activities, including provision of recreational opportunities. In other words, current management would remain much the same, but would be intensified.

This alternative would add the entire river below Summit Creek to the Washington State Scenic Rivers System. The boundary would be narrowed to 1/4 mile from the ordinary high water mark on each side of the river, to be consistent with state provisions. Two management areas within the boundary would be established, a shorelines area which includes the area within 200 feet of the river (the same area as covered by the county's Shorelines Master Plan) and an upland area, which includes all lands from the shorelines area out to 1/4 mile from the river. The shorelines area would be the focus of most management actions. The federal designation would remain but management would be coordinated by the Washington

State Scenic Rivers Program. A Klickitat River Committee would be created, with representatives from county, state, and federal governments, the Yakima Indian Nation, and private citizens.

Beyond enforcement of existing regulations, the main additional resource protection mechanism would be increased recreation management and increased efforts to work with landowners to accomplish conservation goals. This would include encouraging voluntary resource protection efforts such as donating conservation easements, as well as providing information on tax incentives and possible sources for funding or technical assistance with forestry, agriculture, and other existing land use operations. Recreational uses and opportunities would remain similar to the way they are now, and recreational use would be monitored to help with future management decisions.

The Forest Service would maintain an oversight role, including monitoring of resource conditions, to make sure river corridor resources were being adequately protected.

Alternative 3. This is the other alternative derived through Task Force discussions. Its goal is to maintain the river resources and character much as they are today, and its chief assumption is that significant additional actions are needed to accomplish this goal. The Forest Service, Klickitat County, Washington State, and the Yakima Indian Nation would form a Management Committee to implement the management plan. The Committee would work with recommendations from a citizen's group that would be established. The existing boundaries would be maintained.

The county would contribute toward additional resource protection by strengthening some existing zoning and shorelines regulations and adding some new ones; the federal government would supplement this by purchase of easements or lands to protect river corridor resources. Existing land uses could continue but new uses would be regulated to insure compatibility with the existing character and qualities of the river corridor. Recreational access would be improved and a limited number of facilities would be added to the existing recreation sites.

Because the Forest Service would still have the overall management responsibility to assure implementation of the management plan, the agency would maintain an oversight role to make sure river corridor resources were being adequately protected.

Alternative 4. This alternative was developed by the study team to ensure that a wide range of alternatives was addressed as required by NEPA. The management goal would be not just to maintain, but to enhance river corridor values and provide for increased recreational use and development compatible with resource enhancement objectives. The Forest Service would have responsibility for management, but would be closely guided by recommendations from a formal citizens'

advisory committee that would operate under the provisions of the Federal Advisory Committee Act. The existing interim boundaries would be maintained.

The county generally would not be asked to strengthen existing zoning or shorelines regulations. Federal purchase of land or easements would be expanded; this alternative relies on compensation, not zoning mechanisms, to meet its resource enhancement goals. Existing recreational sites would contain more facilities and more resource interpretation—including signs, roadside displays, and other forms of communication—to let people know more about the river corridor and its values.

Areas of Controversy

The task force's ability to reach consensus on a management alternative indicates that much controversy has been resolved. Howver, individuals have diverse viewpoints on many aspects of future management of the lower Klickitat, and several primary areas of controversy have been evident:

- The adequacy of existing county, state, and federal mechanisms to accomplish resource protection, and the willingness and ability of the parties involved to undertake and pay for the administrative duties that would come with river management;
- The appropriate role of the Forest Service in managing a river corridor containing no National Forest land, including the role of acquisition, especially acquisition through condemnation, as a means to protect river values.
- The trade-offs or balance between increased resource protection and private property rights, especially given other laws (such as the CRGNSA Act) that affect private lands in the region.

Changes between the Draft and Final EIS

This document is similar to the Draft EIS in organization and content. However, several changes and additions have been made:

- 1. The selection of a preferred alternative (alternative 2);
- 2. The addition of Appendix A, which summarizes public comments on the Draft EIS and the study team's response to these comments;
- 3. Technical corrections made as a result of new information;
- 4. Modifications to Alternative 2 (preferred):
- Narrowing of the boundaries and delineation of two management areas within the new boundaries. The Secretary of Agriculture would recommend to Congress that the existing boundaries be changed to

- reflect public and Task Force comment (see Table 2-1);
- Addition of a ban on construction of roads on steep slopes in the Klickitat canyon;
- Deletion of references to prohibiting boating in the gorge;
- Clarification regarding how and when money will be available to achieve management objectives;
- Clarification of the role of acquisition in corridor management and the limitations on acquiring lands through condemnation
- 5. Modifications to the environmental consequences chapter to account for changes made to Alternative 2;
- 6. Modifications to the estimated costs chart in Table 2-1 to account for changes in Alternative 2;
- 7. The addition of Appendix B, which presents a management plan that describes how the preferred alternative will be implemented.

Organization of This Document

Chapter 1 provides background on the purpose of this EIS, the study process used to produce it (including the public involvement program), the Wild and Scenic Rivers Act, the boundary delineation process, and outstanding resource values in the river corridor.

Chapter 2 discusses the key study issues that formed the basis for developing alternatives, and then some alternatives that surfaced during the study process but were not considered in detail. The final section describes in detail the four draft management alternatives that were carried forth and evaluated in the Final EIS.

Chapter 3 describes the affected environment—the physical, biological, social, and economic resources of the lower Klickitat River corridor.

Chapter 4 assesses the impacts of each alternative on the resources described in Chapter 3.

References cited and other documents used to prepare this document are provided in a bibliography. Also provided is the list of people who prepared the EIS and the list of individuals, agencies, groups, and Tribes to whom a copy of the EIS was mailed.

Appendix A summarizes public comments on the Draft EIS and presents responses to these comments. Appendix B is the management plan for the river.

W

Impacts of Alternatives on Key Study Issues

The following matrix compares the impacts of the alternatives on the seven key study issues.

Impacts of the Alternatives on Key Study Issues

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Protection of Instream Resources	Free-flowing Character: Wild and Scenic Rivers Act prohibits federal involvement in dams, other federal projects prohibited if they directly and adversely affect river values.	Free-flowing Character: Same as Alt. 1 except state-level dam protection would be added for the entire river between Summit Creek and the mouth.	Free-flowing Character: Same as Alt. 1.	Free-flowing Character: Same as Alt. 1.
	Water Quality and Quantity: Possible short term increases in sedimentation from construction, logging and other activities.	Water Quality and Quantity: Same as Alt. I except voluntary efforts and county restrictions on new road-building could result in slightly less risk of erosion and sedimentation.	Water Quality and Quantity: Existing conditions would be maintained or enhanced through controls on construction and logging.	Water Quality and Quantity: Same as Alt. 3.
	Fish: Northwest Power Planning Council System Plan will enhance anadromous fishery, including a new hatchery; anticipated corridor activities would have little effect on fish habitat.	Fish: Same as Alt. 1, except fish would benefit from reduced risk of sedimentation	Fish: Same as Alt. 2.	Fish: Same as Alt. 2.

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Protection of Upland Resources	Scenery: Partially protected by steep terrain, county zoning, and some public land ownership. Potential residential development (and, to a lesser extent, logging) could change the character of the corridor. CRGNSA proposed zoning protects visual quality in the lower 1.5 miles (same for all Alts.)	Scenery: Successful voluntary programs would reduce visual impacts from construction and logging; local support could extend this protection to rest of viewshed. The county's restrictions on building roads on steep slopes would maintain the existing character and scenery of the canyon walls. Aesthetic improvements could occur and viewing opportunities may be improved. The visual quality objective of partial retention would be met, meaning that new development would blend in with the existing landscape.	Scenery: Visual quality and the character of the river corridor would be maintained. Aesthetic improvements would occur and viewing opportunities would be improved.	Scenery: Visual quality and the natural character of the river corridor would be enhanced. Additional aesthetic improvements would occur and viewing opportunities would be greatly improved.
	Vegetation and Wildlife: Potential for increased impacts from residential construction, grazing and logging. Increased recreation use could disrupt wildlife.	Vegetation and Wildlife: Successful voluntary programs could reduce impacts of construction, grazing and logging. Valuable oak stands would be identified and maintained. Increased recreation management actions would mitigate effects of increased recreational use.	Vegetation and Wildlife: The most ecologically significant oak stands would be preserved by purchasing 200 acres; county implementation of an oak conservation plan would maintain other significant stands. Purchase of up to 50 acres of lands in fee title would preserve sensitive plant species. Expansion of the river buffer would increase streamside habitat available for wildlife. County requirements for vegetative retention would reduce potential impacts of residential construction. Increased recreation management actions would mitigate effects of increased	Vegetation and Wildlife: Similar to Alt. 3 except potential impacts would be further reduced by purchase of 400 acres of oak and up to 100 acres would be of sensitive plant species. Expansion of the river buffer would increase streamside habitat available for wildlife. County requirements for vegetative retention would reduce potential impacts of residential construction. Increased recreation management actions would mitigate effects of increased recreational use.

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Native American Concerns	Treaty Rights: Reserved right to access for fishing and with some limitations, for hunting and other traditional uses. Right to participate in management of fishery and fish habitat.	Treaty Rights: No change in existing rights.	Treaty Rights: No change in existing rights.	Treaty Rights: No change in existing rights.
	Dip-net Fishing Site: Legal right to access for fishing and other traditional uses. Safety of dip-net fishermen is a concern and numerous drownings have occurred.	Dip-net Fishing Site: Legal rights to access as in Alt. 1. Implementation of site plan would protect site over the long term. A program to decrease accidents and drownings of dip-net fishermen would be implemented.	Dip-net Fishing Site: Legal rights to access as in Alt. 1. Implementation of site plan would protect site over the long term. A program to decrease accidents and drownings of dip-net fishermen would be implemented, and technical assistance and funding provided to the Native American search-andrescue team. Boating prohibited in the gorge to avoid impacts to dipnet fishing. Public interpretation would minimize impacts to dipnet dishing and has the potential to reduce impacts from current levels.	Dip-net Fishing Site: Access, site plan, and safety measures are same as under Alt. 3. Boating through the gorge would be allowed only by permit, coordinated with the Yakima Indian Nation to avoid impacts to dip-net fishing.
	Archaeological Resources: State law protects burial sites; archaeological sites may be inadvertently affected by development.	Archaeological Resources: Inventory and subsequent actions would protect key sites.	Archaeological Resources: Same as Alt. 2 except wider boundaries could allow protection of sites farther from the river.	Archaeological Resources: Same as Alt. 3.
	Management Role: Existing role in management of fish and wildlife resources.	Management Role: Same as Alt. I plus Yakima Indian Nation would participate on River Committee.	Management Role: Same as Alt. I plus Yakima Indian Nation would serve as partner on Wild and Scenic River Management Committee.	Management Role: Yakima Indian Nation would serve on Advisory Committee rather than on Management Committee.

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Provision of Recreation and Public Access	Recreation use levels: Increased use levels due to greater recreation visitation in the Columbia Gorge, possible restrictions on nearby rivers, and designation is likely to result in environmental damage to recreation sites, and to increase crowding and conflicts among recreationists. Increased incidents of trespass, vandalism, wildfire and other problems for landowners may occur.	Recreation use levels: Use levels may increase slightly higher than under Alt. I as a combined result of additional state designation and limited facility improvements. The use increase anticipated due to these factors is considered slight when added to the more significant variables listed under Alt. I.	Recreation use levels: Use would probably increase similarly to levels under Alt.2 because of additional facilities and access improvements.	Recreation Use levels: Use levels would be anticipated to increase moderately over those in Alt. I due to substantial improvements to existing recreation sites, expansion of recreational access, and increased visitor information and signing.
	Access: Long-term access to several traditional river access points on private lands is not guaranteed.	Access: Public use of currently- used river access sites on private lands would be provided through agreements, easements, or acquisition.	Access: Purchase of easements or lands for access at sites would guarantee access to important locations.	Access: Alt. 3 plus additional overnight camping facilities, more roadside parking and pull-offs, and trails to or along the river.
	Management and Monitoring: Existing recreation opportunities could be degraded over time by increased use, corridor development, and loss of access. Management is reactive, with no coordination among agencies or an agreed-on river management plan. One of the river's most outstanding features, the dip-net fishery, is not interpreted for the public. Lack of a monitoring program means that use trends and patterns can not be quantitatively measured and documented.	Management and Monitoring: Existing Roaded Natural opportunities would be maintained. A monitoring program would help to analyze use levels and patterns, and detect landscape damage, crowding, or use conflicts before they become substantial. Coordinated recreation planning and management would reduce physical and social impacts by anticipating problems, planning for and directing recreation use, and providing appropriate levels of information, facilities, and access.	Management and Monitoring: Existing opportunities would be guaranteed to continue over the long term. A comprehensive monitoring program and coordinated management effort would prevent unacceptable levels of impacts to the landscape and address crowding and conflicts before problems arise. A full-time seasonal river ranger would provide many benefits for on the ground monitoring, management and enforcement.	Management and Monitoring: Existing opportunities would be guaranteed to continue over the long term. These and additional opportunities would be enhanced by greater corridor protection, interpretation, and access. People would have the opportunity to learn more about the dip-net fishery. Other impacts similar to those under Alt. 3.

X	Summary	
Alternative 4	Private Property: The opportunity to build on about 110 sites would be foreclosed to meet river management objectives; landowners would be compensated for 50 of these parcels (60 are excessively steep and so would be restricted by strengthened zoning). Timber harvest would be regulated as described below and under Upland Resources. Screening and placement of new houses and trailers would be regulated and compensated for by easement acquisition (or voluntary agreements). Payments to landowners would total an estimated \$2,124,000 for easements and land.	Local Economy: Purchase of timber to conserve resource values would reduce the amount available for harvest by 4 mmbf (out of 50 mmbf in corridor). No reduction in grazing. Moderate additional increases in tourism revenues. Maximum potential increase in county property tax receipts of \$30,760 (offset by need for increased services) and potential population increase of 91 people.
Alternative 3	Private Property: The opportunity to build on about 90 sites would be foreclosed to meet river management objectives (landowners would be compensated for eight sites; 60 excessively steep sites and 25 in the floodplain, locations not likely to be built on, would be regulated by zoning). Timber harvest would be regulated as described below and under Upland Resources. Strengthened zoning and SMP provisions, agreements, and easements would regulate visibility of houses and trailers. Landowners would be compensated for easements or land purchased but not for activities foregone dut to increased county regulation. Payments to landowners would total an estimated \$744,250 for easements and land.	Local Economy: Easements regulating timber harvest to meet visual quality objectives would reduce the amount of harvestable timber by 2 mmbf (out of 50 mmbf in corridor); no reduction in grazing. Slight additional increases in tourism revenues. Maximum potential increase in county property tax receipts of \$48,350 (offset by need for increased services) and potential population increase of 143 people.
Alternative 2 (preferred)	Private Property: Similar to Alt. I; management would emphasize voluntary resource protection measures, not additional regulation of private lands, resulting in little or no impacts to peoples' ability to control their land. Landowners who donated conservation easements could pay less in property taxes, and resale value could be affected. Landowners would be compensated for any additional restrictions in land uses.	Local Economy: Similar to Alt. 1 with slight increases in tourism revenues. Any decreases in timber harvest or agriculture would be voluntary.
Alternative 1	Private Property: 67% of the corridor (3,275 acres) is privately owned. Proposed Shorelines Master Plan revision and CRGNSA zoning would increase regulations. A theoretical maximum of about 155 building sites are available, but about 85 sites are not likely to be built on because they are on steep slopes or in the floodplain.	Local Economy: Grazing, home construction, tourism and logging in the lower Klickitat corridor make minor contributions to the local economy. There are about 2,500 acres (50 mmbf) of harvestable timber and 1,500 AUM grazing. Maximum possible development of houses in the corridor could increase county property tax receipts by \$131,850 (offset by the need for increased services) and increase corridor population by 391 people.
Key Issues:	Effects on Private Property and the Local Economy	

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
County and State Support	County: Little change from routine but added public controversy and administrative pressure due to having a Wild and Scenic river in the county.	County: County responsibilities would increase, mitigated by state provision of staff and state and federal funding for management activities. County would have an active role by serving on the River Committee. The county commissioners support this alternative.	County: This alternative would call for the county to strengthen existing zoning and shorelines regulations, increasing its costs and management responsibilities considerably. The changes called for would be controversial. These impacts would be partially mitigated by federal funding to pay for the increased duties and the availability of Forest Scrvice river rangers to help implement the plan. The county would have an critical role in river management, serving as a partner on the Management Committee.	County: This alternative's principal way of meeting resource protection objectives is federal purchase of easements and/or lands in fee title at fair market value. This is compatible with the county's position that people should be compensated if increased resource protection efforts reduce peoples' private property rights. The Forest Service would have the lead management role; the county's existing management responsibilities would continue. The county would serve on the formal Citizen's Advisory Committee, rather being a partner in implementation of the management
	State: Little change from routine in administration of state regulations or in the management of state lands, which comprise 22% of the river corridor; Wild and Scenic designation is compatible with state salmon restoration efforts.	State: The river would be added to the state Scenic River system, increasing costs and administrative responsibilities. Increased state role in river conservation as opposed to Alt. 1. The State of Washington supports this alternative. Benefits of this alternative would apply to all portions of river between the mouth and Summit Creek.	State: The state would realize the benefits of increased resource protection but without the greatly expanded duties or lead management role called for under Alt. 2. State agencies would be asked to perform many of the same duties as under Alt. 2, partially mitigated by federal funding and staff assistance. The State would serve on as a partner on the Management Committee.	State: Similar to Alt. 3 but the state would serve on the formal Citizen's Advisory Committee, rather being a partner in implementation of the management plan. The state's existing management responsibilities would continue, but would not be increased as much as under Alt. 2 or 3.

Key Issues:	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Cost and Implementation	Cost: For the most part, the eost of existing management activities in the river corridor are funded out of general county and state budgets and so are difficult to estimate. Responsibilities would not increase significantly under this alternative.	Cost: One-time acquisition and facility improvement cost of \$1,272,000; annual operation cost of \$105,000.	Cost: One-time acquisition, survey, plan development, and facility improvement cost of \$1,326,250; annual operation cost of \$105,000.	Cost: One-time acquisition, survey, plan development, and facility improvement cost of \$2,649,000; annual operation cost of \$120,000.
	Implementation: It is unlikely that this could be ehosen as a preferred alternative because it does not appear to insure adequate long-term protection of river corridor resources. This alternative may be more viable if some of the actions under other alternatives were added. At a minimum, a central coordinating mechanism would be needed.	Implementation: State Scenic River designation would require an act of the state legislature. Legislation adding rivers to the Washington state system did not pass in the last session, pointing to the uncertainty associated with future state designation. Success in meeting some resource protection goals would depend on the success of efforts to encourage and assist landowners with voluntarily conservation of corridor resources. Success also would depend on the effectiveness of interagency cooperation and coordination. The state lead in management would be coupled with a monitoring program designed to measure progress toward achieving management goals. If a given action was not working, the Forest Service would use its funding and management authorities. If this were widely used, the resulting impacts may be similar to those described under Alt. 4.	Implementation: The county would encounter opposition in its proposal to strengthen zoning and shorelines regulations. Even if new regulations were approved, new county commissioners could modify regulations through scheduled or unscheduled revisions. If a given action was not working, the Forest Service could use its funding and management authorities. If this were widely used, the resulting impacts may be similar to those described under Alt. 4.	Implementation: Federal acquisition provisions would require congressional appropriations. Management would be simplified due to strong federal lead role. Advisory committee would provide opportunities for public input.



CHAPTER 1

Purpose and Need for Action



Much of the lower Klickitat flows through a steep, dry canyon (view north from WDW access site near RM 5).

The purpose of this document is to provide a basis for comparing alternative management plans for the lower Klickitat River, recently added to the National Wild and Scenic Rivers System.

Through the Columbia River Gorge National Scenic Area Act of 1986 (PL 99-663; 16 USC 544), Congress amended the Wild and Scenic Rivers Act (PL 90-542, 16 USC 1274) to add the lower Klickitat (the 10.8-mile segment from Wheeler Canyon down to the confluence with the Columbia) to the National Wild and Scenic Rivers System as a Recreational river segment (see map 1-1). The Secretary of Agriculture, given responsibility for administering the river, delegated this duty to the Forest Service, which must prepare a management plan.

Congress also directed study of the upper Klickitat (the segment from Summit Creek down to the Little Klickitat) to see whether that segment should be added to the National Wild and Scenic Rivers system or managed some other way. The Forest Service will publish a Final Legislative Environmental Impact statement (LEIS) in the near future on designation of that segment.1

This chapter provides background on the management planning process. Section 1.1 describes the process used to develop a management plan for the lower Klickitat. Section 1.2 reviews the purpose and goals of the Wild and Scenic Rivers Act. Section 1.3 describes the public involvement program that was an integral part of the study. Section 1.4 describes the methods used to identify outstanding resource values on the lower Klickitat and describes why it was classified as a Recreational river segment. Section 1.5 summarizes the methods and results of the process used by the Forest Service to identify river corridor management boundaries.

Section 1.6 identifies changes between this document and the draft EIS.

Management Planning

As specified in the Wild and Scenic Rivers Act and federal guidelines, the process of developing a management plan for designated rivers has several steps. Because the management plan is considered a major federal action affecting the environment, the procedures outlined in the National Environmental Policy Act (NEPA) and its set of federal guidelines also must be followed. Here are the main steps taken in the planning process and a brief discussion of each.

- A. Develop preliminary boundaries. The Forest Service identified preliminary boundaries—the area to be influenced by the management plan—through a process discussed in Section 1.3.
- B. Identify management plan issues and develop a public involvement program. Section 1.2 describes the public involvement program undertaken so far. The public comment period on this document, plus the public meeting to be held in Lyle, are important components of this program. Section 2.1 in Chapter 2 describes the key study issues identified.
- C. Identify outstanding resources in the river corridor. Although the identification of important resources was a product of the issue identification step, an additional analysis was undertaken to identify what the Wild and Scenic Rivers Act refers to as "outstandingly remarkable" values; protection of these values is a main reason for adding the river to the National Wild and Scenic Rivers System. Because the lower Klickitat was added to the system without some of the studies that traditionally take place before designation, this step had not been conducted. It is described in Section 1.3.
- D. Develop alternatives for river management. The NEPA process mandates that a range of reasonable alternatives for river corridor management must be developed and evaluated before any one management direction (called a preferred alternative) is selected and implemented. Four possible management futures for the lower Klickitat were identified. Chapter 2 presents the four alternatives and describes how they were developed.
- E. Prepare a draft EIS. The first four steps are part of EIS preparation, but they must be compiled into a document along with several other key items. These include a discussion of the affected environment, a thorough analysis of the impacts of each management alternative on the affected environment, and other information such as a summary, list of people who prepared the draft EIS, and list of people to whom the draft EIS

^{1.} In the same Act, Congress designated the lower White Salmon (the segment from Northwestern Lake up to Gilmer Creek) as a Scenic River, and directed the Forest Service to prepare a management plan. It also directed the agency to study the upper White Salmon (the segment from Gilmer Creek up to the confluence with Trout Lake Creek) for possible designation. These processes are documented in separate environmental impact statements available from the Forest Service.

EIS initially was sent. The purpose of the draft EIS was to provide all of this information so that agencies, Tribes, and anyone else concerned about the future of the river can make informed comments regarding their preferences.

F. Prepare a final EI5. This process also had several components. First, the comments received on the draft EIS were compiled. Based on these comments and Task Force discussion (see Section 1.3), the Forest Service selected a preferred alternative. A management plan providing additional detail on how the preferred alternative will be implemented was then prepared. All of this information is contained in the Final EIS. Following release of the Final EIS, management of the river begins pending rulings on any administrative appeals received after the EIS is published.

1.2 Introduction to the Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to balance river development with river protection:

The Congress declares that the established national policy of dam and other construction...needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

To accomplish this goal, Congress created the National Wild and Scenic Rivers system:

It is hereby declared to be the policy of the United

States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and...shall be protected for the benefit and enjoyment of present and future generations.

By the end of 1988, about 9,200 miles of rivers on 119 river segments had been added to the Wild and Scenic Rivers system (Coyle, 1988). Designation as a Wild and Scenic river does not mean that the river corridor, which generally includes the land within about 1/4 mile on either side of the river, is managed like a National Park or Wilderness Area. The management goal is to maintain the character of the river in its current state and protect or enhance specific resource values. Existing resource uses may continue—including timber

harvest, agriculture and grazing, residential occupancy, and recreation—and new uses generally are allowed as long as they do not adversely affect river corridor resources. Federal water projects, including dams, are specifically prohibited.

1.3 Public Involvement Program

Because the river corridor contains only a negligible amount of federal land, an extensive public involvement program was developed to make sure that the management plan would consider the concerns of the Yakima Indian Nation, Klickitat County, the State of Washington, landowners, local residents, and others having a stake in how the river is managed. The public involvement program consisted of public meetings, a study Task Force, mailings to interested parties, and study newsletters, as well as ongoing informal meetings with any party requesting them.

Public Meetings. The National Environmental Policy Act (PL 91-190) and implementing federal regulations (40 CFR Parts 1500-1508 as of July 1, 1986) specify the required procedures for preparing environmental impact statements. This includes holding scoping meetings early in the EIS process so citizens have the opportunity to express issues and concerns important to them. Public meetings were held in Lyle, Trout Lake, and White Salmon in October, 1987, to let people know about the studies scheduled for the Klickitat and White Salmon rivers.

A formal scoping meeting for the lower Klickitat, attended by about 20 people, took place in Lyle on April 19, 1989. An additional public meeting, attended by about 15 people, was held in Lyle on December 5, 1989, to obtain comments on the preliminary list of alternatives. Both meetings were advertised in local and regional media.



The Task Force enjoys a lighter moment during one of its meetings.

The formal public comment period on the Draft EIS began on August 3, 1990, with a Notice of Intent published in the Federal Register, and ended on September 17, 1990. A public meeting to provide an opportunity for verbal comment on the Draft EIS was held in Lyle on September 5, 1990. The meeting was attended by about 50 members of the public. The meeting minutes, provided in Appendix A, show that nearly all who attended were upset at the prospect of federal involvement in river management and equated Wild and Scenic designation with establishment and management of the Columbia River Gorge National Scenic Area.

In addition, 23 written comments were received. These included 10 letters from individuals or families, 4 letters from private groups, organizations, or companies, 2 from Klickitat County (Board of County Commissioners; Planning Department), 1 from the State of Washington, 5 from federal agencies or councils, and 1 from Indian tribes. The letters are included in Appendix A, along with responses to substantive comments.

Task Force. To help ensure that diverse viewpoints were considered during each step of the study, a broad-based public Task Force was created (the same Task Force also worked with the studies being conducted on the upper Klickitat, lower White Salmon, and upper White Salmon).

The Task Force served as an integral part of the planning team,2 helping to identify issues, determine the significance of river resources, develop and refine alternatives for designation and management, and keep their fellow interest group members informed about the study.

The Task Force was composed of 24 representatives (and their alternates) from a wide range of interests concerned about the future of the river: Yakima Indian Nation and River People, U.S.D.A. Forest Service (Mt. Adams Ranger District), Washington Department of Wildlife, Washington Department of Fisheries, Klickitat County, private river floaters and anglers, commercial outfitters, Pacific Power and Light company, Mt. Adams Orchards, Friends of the Columbia Gorge, SDS Lumber Company, Champion International, Friends of the White Salmon, Washington Environmental Council, upper White Salmon residents, farmers, and irrigators, lower White Salmon residents, upper Klickitat residents and ranchers, and lower Klickitat residents and ranchers

The Task Force held its first meeting on March 16, 1989, and met monthly until June. During these sessions, all open to the public, the Task Force became familiar with the Wild and

The planning team consisted of Land and Water Associates (the consulting firm hired to conduct all phases of the management planning process), the Task Force, and the Wild and Scenic Rivers Team located at the USDA Forest Service Columbia River Gorge National Scenic Area office, which reviewed work as it was conducted by the consultants.

Scenic Rivers Act and developed a list of issues and concerns about future management of the rivers. The group then split into three working groups, one for the upper White Salmon, one for the lower White Salmon, and one for the Klickitat. Between June, 1989 and November, 1990, these subgroups held meetings at least once a month—and usually more frequently. In all, the Task Force and its working groups met over 50 times in the last 20 months—a tremendous commitment of time and energy on the part of the members.

Interested Parties. A list of about 90 people, agencies, and groups was compiled to make sure that other interests were kept informed of the study. Interested parties were mailed copies of all Task Force meeting minutes, announcements of future Task Force meetings, and three newsletters. All parties on this list were mailed copies of this document. The interested parties were a subset of the project mailing list of about 1,600.

Newsletters. Between spring, 1989 and summer, 1990, three informational newsletters were prepared (several earlier mailings had informed people about the lower Klickitat planning process). The first, published in April, 1989 during the issue identification process, let people know about the study. The second, published in November, 1989 after the resource analysis, was designed to provide an update of study activities. The third, published in June 1990, announced the availability of the draft EIS for public review. All three newsletters contained information about not just the lower

November, 1989 Newsletter



In 1986, the Columbia River Gorge National Scenic Area Act added the lower Klickitat and lower White Salmon to the National Wild and Scenic Rivers System. The Act also said that the upper portions of both rivers should be studied to see if they should be added to the Wild and Spenic system or managed some enic system or managed some

The Act directed the Forest Service to prepare river manage ment plans for the lower rivers and to prepare study reports for the upper rivers. The Forest Service hired Land and Water Associates, a natural resource consulting firm, to take the lead on the management plan for the lower Kilckitat and to conduct

lower Klickitat and to conduct studies of the upper segments of both rivers. These efforts have been combined with the development of a management plan for the lower White Salmon to create the Klickitat/White Salmon to create the Klickitat/White Salmon Rivers Study.

The study has two phases. Phase I, completed in September, was an inventory and evaluation of the scenic, recreational, geologic, fish and wildlife, historic, archaeologic, and other values along the Klickitat and White Salmon rivers. We review the Salmon rivers. We review the results of Phase I in this news letter.

During phase II, to be completed by fall, 1990, alternative ways to conserve these values and manage other river-related resources will be identified. The result will be formal recommendations, in the form of environmental impact statements (EIS), on how the rivers should be managed.

Recommendations for future

Recommendations for future management are being developed by a public Task Force. The Task Force is a group of people representing a wide range of interests that have a stake in future management of the Klickitat and White Salmon Rivers. Its goal is to reach consensus on the river management plans that will be forwarded to Congress, so the Task Force has a great deal of involvement in the outcome of the study.

involvement in the outcome.
The Task Force members have a difficult job—to represent their interests vigorously, while remaining willing to listen to the viewpoints of others and work toward achieving a consensus on river management. By consensus we mean developing a management plan that achieves a reason—this behave a mong the various ment plan that achieves a rea able balance among the vario interests and their concerns.

Because the Task Force is such a diverse group, we hope that any plan that is agreed to by all members also would be ac-ceptable to most everyone else.

CONTENTS
sk Force
tstanding Resource Values
III. O. I. We

White Salmon River Klickitat River Klickitat County Update Land Acquisition Update River Clean Up Success. Klickitat & White Salmon Management Themes and

Objectives 8-11 Dates to Remember. ... 12



Klickitat, but about the planning processes on the upper Klickitat, upper White Salmon, and lower White Salmon. Collectively, these four planning efforts have been referred to as The Klickitat/White Salmon Rivers Study.

The newsletters were mailed to about 1,600 people, including all those owning land in the lower Klickitat river corridor (as well as landowners along the upper Klickitat and entire White Salmon rivers), the interested parties and Task Force members, and others who requested to be kept informed of study progress. Another newletter will announce the availability of this Final EIS.

1.4 Outstanding Resource Analysis and Classification

The lower Klickitat was added to the Wild and Scenic Rivers System in a way that differs from many situations; it was an "instant designation," part of another piece of legislation (the Gorge Act). Often, rivers that have the potential to be designated go through a study process that is specified by the Wild and Scenic Rivers Act and federal guidelines (47 FR 39454 Tuesday, September 7, 1982). This process typically includes what is known as the eligibility study and classification analysis.

The purpose of the eligibility study is to determine if the river meets the minimum requirements for addition to the national system. In order to be eligible for addition to the system, a river segment must be free-flowing and possess one or more "outstandingly remarkable" values, such as scenic, recreational, geologic, fish, wildlife, historic, ecologic, or cultural resources. Eligible rivers are then classified as either potential "Wild," "Scenic," or "Recreational" river segments based on the level of development present in the river corridor.

The lower Klickitat was designated a Recreational river segment because it is readily accessible by road or railroad, has a fair amount of development along its shoreline, and has been channelized and rip-rapped in the past due to road and railroad construction. The term "Recreational" tends to be misleading because it has a common-sense connotation other than level and type of development; people often believe that recreational use is emphasized in management of "Recreational" rivers. In reality, management is designed to conserve the values identified and maintain or enhance the existing character of the river corridor, regardless of the classification.

Because the lower Klickitat was an instant designation river, the other main characteristic of the eligibility study—the analysis to identify "outstandingly remarkable" value—was not conducted before designation. However, it was still necessary to conduct an analysis to identify outstanding resources, because these (as well as other important resources in the corridor) must be adequately protected by the management plan.

Resource values on the lower Klickitat were studied in greater detail by comparing them to similar features on other rivers in the region. A set of criteria were developed for each resource feature to use in making the comparisons. For instance, the significance of the anadromous fishery on the Klickitat was assessed by comparing such factors as the size of runs, species and races present, habitat quality, and extent of natural reproduction. This allowed identification of resources on the upper Klickitat that really stood out. The full methodology and rationale are contained in "A Systematic Approach to Determining the Eligibility of Wild and Scenic River Candidates," a report prepared by Land and Water Associates.

The region selected for comparative analyses was the Columbia River gorge area between the Cascade Mountains to the west and the Columbia Plateau to the east. This included all major tributaries to the Columbia River spanning the crest of the Cascades, from the confluence of the Umatilla River in eastern Oregon to the Sandy River near Portland.

The biological evaluation was conducted using existing state and federal government lists of "critical habitat" for threatened, endangered, or sensitive wildlife species. Cultural resources listed on state or federal historic registers or that are known to be unique were assumed to have at least regional significance. Adequate data did not exist for conducting a comprehensive regional comparison of rare plants or plant communities.

These analyses identified five outstanding resources on the lower Klickitat and its immediate area: the river's hydrology; anadromous fish; resident fish; the Native American dip-net fishing sites; and the geology of the gorge between about RM 1.1 and RM 2.5. These and other resources in the river corridor are described in Chapter 3; outstanding resources are highlighted in boxes.

1.5 Boundary Process

The Wild and Scenic Rivers Act (Section 3(b)) specifies that after a river is designated, the agency charged with its administration must establish detailed boundaries delineating the land area within the river corridor that will be managed under the Act. The Act specifies that the area within the corridor should not average more than 320 acres per mile on both sides of the river, placing the boundaries an average of 1/4 mile from the river on each bank.

Boundary decisions are made on the basis of topography, location of outstanding resources, land ownership and use patterns, and public comment. The Forest Service issued draft boundaries for the lower Klickitat in September, 1987, and held a public meeting in Lyle on October 7, 1987. The Forest Service mailed maps showing the draft boundaries and a questionnaire asking for comments to approximately 1,200

^{3.} Rather than use this legal term, we will refer to these resources as "Outstanding."

people in September, 1987. This mailout also contained information and solicited comment on the proposed boundaries for the lower White Salmon Wild and Scenic River

Of the 100 people who provided comments, about two-thirds made specific suggestions about boundary changes on the two rivers. The vast majority of comments addressed the lower White Salmon boundaries. Regarding the Klickitat River, people recommended excluding the town of Lyle and including a gravel pit across the river from Lyle; one landowner requested to have more of his land included within the boundaries to avoid isolating a part of his property.

The Forest Service redrafted the boundaries, removing a portion of the acreage within Lyle and adding the landowner's acreage to the corridor. The gravel pit was not included because it is located within the Columbia River Gorge National Scenic Area boundary, which will address it in that management plan. In addition, about 60 acres were added along Silvas Creek, Knight Canyon, and Dillacort Canyon in response to fisheries concerns, and about 80 acres important to the viewshed were added in several locations on the east side of the river.

The revised boundaries included 4,830 acres; 250 of these are within the river channel, resulting in an average of 420 acres per river mile. Another opportunity for public review was provided when the boundaries were published as a Notice of Availability in the Federal Register on November 17, 1987. The boundaries were not appealed in the 45-day period following this announcement and Congress approved the boundaries (recognizing that the acreage included was greater than that specified in the Act) in 1988.

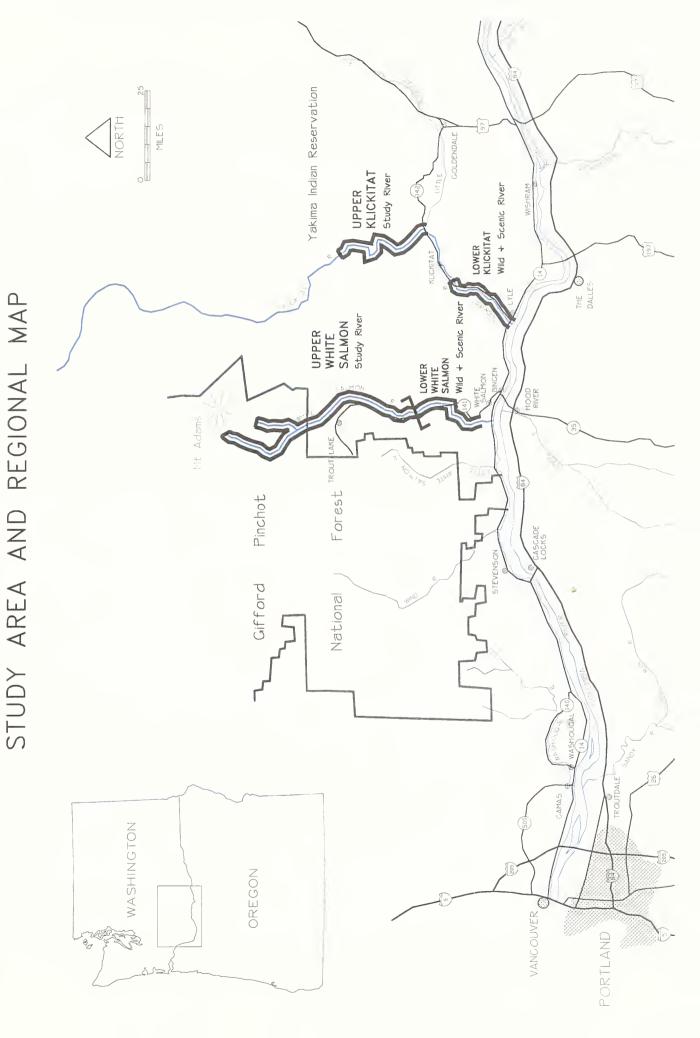
The Draft EIS stated that, in preparing the alternatives, consideration was given to changing the boundaries but discarded due to an apparent lack of concern by the public. During the public review period for the Draft EIS, many people, including Task Force members, requested that the boundaries be reconsidered. Their rationale was that boundaries had been established before resources and alternative management strategies were evaluated, so the boundaries had no meaning for the public. Upon the recommendation of the Task Force and consideration of public comment, the Final EIS includes a new boundary for Alternative 2.

1.6 Changes between the Draft and Final EIS

This document is similar to the Draft EIS in organization and content. However, several changes and additions have been made:

4. In the rest of this document, the term "river corridor" will refer to the area within the designated boundaries.

- 1. The selection of a preferred alternative;
- 2. The addition of Appendix A, which summarizes public comments on the Draft EIS and the study team's response to these comments:
- 3. Technical corrections made as a result of new information;
- 4. Modifications to Alternative 2 (preferred):
- Narrowing of the boundaries and delineation of two management areas within the new boundaries. The Secretary of Agriculture would recommend to Congress that the existing boundaries be changed to reflect public and Task Force comment (see Table 2-1).
- Addition of a ban on construction of roads on steep slopes in the Klickitat canyon
- Deletion of references to prohibiting boating in the gorge
- Clarification regarding how and when money will be available to achieve management objectives
- Clarification of the role of acquisition in corridor management and the limitations on acquiring lands through condemnation
- 5. Modifications to the environmental consequences chapter to account for changes made to Alternative 2;
- 6. Modifications to the estimated costs chart in Table 2-1 to account for changes in Alternative 2;
- 7. The addition of Appendix B, which presents a management plan that describes how the preferred alternative will be implemented.







CHAPTER 2

Alternatives



The lower Klickitat gorge is one of the few remaining traditional dip-net fishing sites that Native Americans continue to use today.

This chapter presents and compares the four alternatives developed during the study process. Each alternative presents a different view of how the lower Klickitat River corridor should be managed in the future.

Before describing the alternatives, this chapter discusses the seven key issues that formed the basis for developing the alternatives (Section 2.1) and describes several alternatives considered during the study process and subsequently rejected (Section 2.2). Section 2.3 presents the alternatives considered in detail in narrative form to convey the essence of each. The accompanying matrix (Section 2.4) provides more detail on the actions to be taken under each alternative, in tabular form for easy comparison.

2.1 Key Study Issues

Seven key issues guided the development and evaluation of lower Klickitat River management alternatives. Many of these were first brought up by members of the project Task Force in an issue identification session held in March, 1989. These were later elaborated on at additional Task Force meetings, public meetings and one-on-one meetings with interested parties.

Issue #1: Long-term protection or enhancement of important instream and shoreline resources, including free-flowing character, water quality and quantity, and fish habitat.

The lower Klickitat's hydrology, its gorge, and its anadromous and resident fish are outstanding resources. The abundant supply of clean water provides many other benefits, including recreation, wildlife, and consumptive uses.

Concern has been voiced regarding the adequacy of existing local, state, and federal mechanisms to provide long-term protection for instream and shoreline resources. While the river is now free-flowing and its water quality good, how will future pressures affect the river, and will existing mechanisms be capable of responding to these pressures? Dam protection is not an issue because the river has already been added to the federal Wild and Scenic Rivers System, preventing the federal government from licensing dams along the river segment.

An allied concern is the fate of the Klickitat's salmon and steelhead runs. Local people, be they ranchers, Native Americans, or sport anglers, look to the river's fish resources as a source of pride. They are concerned that fish populations have been depleted and they want to return the fish runs to their former grandeur. Little if any concern has been raised that an

enhanced anadromous fishery would conflict with other uses of the river corridor. Are proposed fishery measures adequate? Are there other actions that should be taken?

In its comment on the Draft EIS, the Northwest Steelhead and Salmon Council stated:

Our major concerns are in the areas of water quality and shoreline management for the protection of anadromous fish. As long as the water quality is maintained or improved, we have no objections to which management alternative is selected.

Issue #2: Long-term protection or enhancement of important upland resources, including scenery, wildlife habitat, and vegetation.

Upland resources are those located on land away from the shorelines but still located within the river corridor. The lower Klickitat river corridor contains many important upland values, including the corridor's natural character, scenery, and stands of Oregon white oak.

Many landowners, Native Americans, recreationists, and others care deeply about the river. People are concerned that change is in the wind, and that natural values will be subject to increasing stress. Preservation of scenic views is of concern, especially given the naturalness of the steep slopes that enclose the river. A primary concern of many is the increasing demand for residential and recreational property. People question the ability of existing mechanisms to respond in a way that will ensure long-term protection for upland resources.

The future of the area's Oregon white oak is of particular concern to naturalists and wildlife enthusiasts. They see this resource as an important component of the region's vegetative diversity and fear that oak stands could be depleted through development or conversion to rangeland or harvestable softwoods.

One individual who commented on the Draft EIS expressed this concern:

An issue I feel strongly about, and one that I feel is most important, is biological diversity. I believe that it is essential to maintain and enhance wildlife habitat. Such a river area as the lower Klickitat provides support for many species of plants and animals...We all have a responsibility to maintain these ecosystems as best we can.

Issue #3: Protection of Native American treaty rights, traditional resource uses, and cultural sites.

Congress recognized the importance of the Klickitat River to Native Americans by directing the Forest Service to consult with the Yakima Indian Nation during the study process taking place on the upper Klickitat (between Summit Creek and the Little Klickitat).

The lower Klickitat river corridor is important to Native Americans for its fish and wildlife habitat, cultural sites relating to Indian history and prehistory, and traditional use values. It is one of the only remaining dip-net fishing sites, requiring close coordination of management activities. The safety of dip-net fishing is a primary concern, as is coordination between the Native American volunteer search-and-rescue team and county search-and-rescue efforts.

The right to use traditional fishing and hunting areas has been confirmed by treaty and subsequent court decisions, as has the right to participate in the management of these resources. Federal law provides Native Americans with access to areas on federal lands traditionally used for religious purposes and state law protects Indian burial grounds.

The Task Force, which included representatives from both the Yakima Indian Nation and local River People, recognized these legal rights and that Native Americans can make a valuable contribution to the future management of the river. The primary issue is, do the alternatives adequately protect traditional uses and resources of importance to Native Americans? In its comment on the Draft EIS, the Bureau of Indian Affairs, Yakima Agency, said

We understand that caselaw, in addition to those cited in the DEIS, affirms and strengthens implied treaty reserved rights off reservations. The Yakima Indian Nation's treaty reserved rights and priveleges must be recognized in light of any management plan for Klickitat River.

Issue #4: Public access and recreation opportunities.

The lower Klickitat provides valuable and easily accessible bank fishing, boating, day use and camping opportunities. Other important recreational activities include nature study, hunting, hiking, swimming and sightseeing. These activities are enhanced by the river corridor's natural appearance, beautiful scenery, and fish and wildlife.

Recreational use of the lower Klickitat currently is low to moderate but is expected to increase, resulting in possible degradation of the recreation experience and the physical and biological environment. Recreation visitors want assured provision of public access and appropriate facilities at key sites to maintain the recreation opportunities existing today. They also are concerned about any management actions that could increase demand for recreation on the lower Klickitat, potentially leading to crowding, increased conflict among recreation visitors, and unacceptable levels and types of impacts to the landscape.

The Task Force and public opposed substantial increases in facilities or access points that could create new demand,

increase conflicts between user groups, and possibly displace current visitors. They agreed, however, that limited facility and access improvements are necessary to protect the resource, channel recreation use to appropriate areas, and provide adequate and safe access.

No Task Force member or commentor on the Draft EIS believed that restrictions on recreational use were necessary at this time to accomplish management objectives. One Task Force member, in her comment on the Draft EIS, stated

I agree strongly with the recommendation that there be no regulations on noncommercial use of the river until management action is called for by undesirable impacts.

Another commentor on the Draft EIS agreed that if recreation does begin to have undesirable impacts, managers will have to explore ways of reducing those unacceptable effects:

The University Kayak Club strongly supports the maintenance of the natural character of rivers and other waterways, while providing access for recreational use. We recognize that in order to maintain the natural beauty and resources of a river, restrictions on use may be necessary.

Issue #5: The effects of resource protection actions on private property rights and the economic viability of existing and future resource uses, including timber harvest, agriculture, and grazing.

Residents of Klickitat County value the rural character of the lower Klickitat. These people, many of whom depend on natural resources for their livelihood, want this character to be maintained. Many believe, however, that this can be accomplished without new restrictions. They suggest that existing laws and regulations are adequate and that landowners are being good stewards to their lands. Why else would the Klickitat River corridor be in such good condition that it was designated a National Wild and Scenic river?

Landowners value their rights to manage their own lands and are concerned by what they see as an erosion of these rights. Impacts to private lands are an especially sensitive issue because the Columbia River Gorge National Scenic Area Act already regulates land uses along the Columbia and on the lower 1.5 miles of the Klickitat River. At public meetings, many people asked who would be making decisions about river management, expressing concern that the eventual management plan would lead to a loss of local control, with decisions being made in Portland, Olympia, or Washington, D.C..

Specific concerns include landowners' ability to graze cattle, subdivide, and build on their land. Landowners also are concerned about the effects of increased public recreational use, including possible increases in fires, trespass, vandalism,

and litter, as well as being forced into an enforcement role. Other concerns include possible economic effects of designation, such as increases in property taxes. Local residents wonder if land prices will increase so much that they will be forced to sell, giving up the way of life they value so highly.

The lower Klickitat River corridor contains limited areas of valuable timber. Many county residents and others are concerned that Wild and Scenic management will add another complication to an industry already embroiled in debate over old growth forests, log exports, and other issues that affect the viability of the timber industry.

At no point in the entire planning process were these types of concerns more evident than at the public meeting on the Draft EIS held in Lyle, Washington, where about 50 irate local residents made their views very clear on the instant designation and river management plan, as shown by these viewpoints:

Existing regulations are adequate. Forest Service oversight sounds too much like the Gorge Commission; the bottom line is that we'll be stuck with the same management as the Gorge Scenic Area. This is unconstitutional and unethical—an outlandish violation of rights.

I've lived and worked in the gorge for the last 60 years. It still looks pretty good, although the federal government isn't helping it any...Why can't we manage our own property?...The revolutionary war was fought because of taxation without representation; that's what this looks like to me.

Issue #6: County and state support for river management and their willingness and ability to be involved.

Wild and Scenic River management plans must contain descriptions of the role that will be played by local and state government in the management of the river. This is a recognition that, particularly regarding rivers flowing through private lands, the federal government's management options are limited. Several essential ingredients to successful river management are, by law, the responsibility of state or local government. For example, the state controls use of fish and wildlife resources and grants water use permits. Local government (which in unincorporated areas means the county) has authority for regulating use of private lands.

Without cooperation from state or local government, the federal government's options for managing corridor resources, and specifically land uses, are greatly restricted. About the only option available to the federal government is to gain an interest in the land through donation or purchase of either conservation easements or lands in fee title. The federal government does have the ability to control use of the water surface on designated Wild and Scenic Rivers.

The State of Washington will continue to have a key role in river corridor management, in part because about 25 percent of the land in the designated corridor is state-owned. One of the alternatives in particular (#2) requires the state to play a critical role in taking the lead in river management. The state is represented on the Task Force, and representatives who have been involved in the structuring of management alternatives have expressed their agencies' willingness to cooperate consistent with their authority.

In its comment on the Draft EIS, the State of Washington expressed its interest in helping to manage the lower Klickitat:

For the Klickitat River, we recommend state Scenic River designation from Summit Creek to the Columbia River for contiguous management...State Parks will work cooperatively with federal agencies within the management boundaries and should management areas coincide, the State Scenic Rivers Program will work with federal managers to form a cooperative approach to management.

To Klickitat County officials, the perceived threats of increased federal intervention include condemnation authority, federal pressure on Klickitat County to strengthen zoning, effects on traditional resource uses, the adequacy of compensation paid to private landowners, a reduction in property tax receipts, and increased publicity and recreational use that could result from designation.

A position statement issued by the Klickitat County commissioners on January 9, 1990, highlighted these concerns:

Although...cooperative management sounds appealing, it is difficult for the county to justify a cooperative Management whereby the county utilizes its land use policies to implement segments of the federal wild and scenic river management plan. This agreement is viewed by many county residents as a taking of property rights by the county without compensation to the local landowners.

The county would be required to play important roles under all alternatives, but particularly under Alternatives 2 and 3. The county has agreed to undertake of the activities proposed under Alternative 2. The county's response to the Draft EIS specified its position:

This response to the lower Klickitat Wild & Scenic River Management Plan Draft EIS is a reaffirmation of the Klickitat County Board of Commissioners position that the best management for this river is to have it managed as a Washington State Scenic River...The County Board of Commissioners for its part recognizes the value of the Klickitat River...and will work toward that end.

Issue #7: The cost and barriers to implementation of required actions.

Each of the alternatives to the no-action alternative assumes that the administrative actions and financial support called for by that alternative would actually take place. This may seem obvious, but the best-designed plan is worthless if it is not likely to be implemented successfully due to financial, administrative, or legal constraints. Task Force members, speaking as taxpayers, also were concerned about the costs of acquisition and administration.

The viability of each alternative depends on the actions called for under that alternative actually being implemented, which includes funding and administration. For example, Alternative 2 calls for the state to exercise certain coordination responsibilities. State designation would require an act of the state legislature. The State would have to follow through with state designation, and then manage the river under the State Scenic Rivers Program in a way that would meet minimum standards for resource protection required by Wild and Scenic Rivers Act. The Scenic Rivers Program would only be interested in including a National Wild and Scenic river in the state program if it could assume administrative control of the river. According to the Scenic Rivers Program Manager, use of federal condemnation authority would be unacceptable.

Currently, the Washington State Scenic Rivers Program consists of just two rivers. In the 1990 legislative session, a bill expanding the program to add six more river segments passed the House, but did not make it out of Senate committee, in part because of controversy over the specific rivers being considered and peoples' concern that state designation could lead to a request by the Governor for federal designation (the Wild and Scenic Rivers Act provides a mechanism for doing this under section 2(a)(ii).

Alternatives that rely partly or wholly on federal funding and management actions by the Forest Service would not be feasible without the level and type of support specified. Similarly, if an alternative calls for the county to take actions, such as strengthening zoning ordinances or the SMP, it means that the county must be willing and able to successfully undertake these activities.

Comments on the draft EIS made by the county, state, and other parties were relied on to estimate the likelihood that these entities would be willing and able to undertake the actions required.

2.2 Alternatives Considered But Not in Detail

During the study process, several alternatives were discussed briefly and then rejected, usually because they were not feasible, not legal, or did not appear to have much, if any, public support. These are listed below. Because some of them reference the alternatives that were considered in detail, it may be helpful to read that section (2.3) first.

Segment." This document assesses management plan alternatives for the lower Klickitat. The study being conducted on the upper Klickitat (from Summit Creek down to the mouth of the Little Klickitat) will lead to a decision by Congress on whether or not to add that segment to the federal system (see Chapter 1 for a brief discussion). As the reader may suspect, the river does not stop flowing between these two segments; in between lies a nine-mile stretch of river. Alternative 2 would recommend adding this middle segment to the state program. However, because Congress did not authorize a study and because it is not adjacent National Forest or other federal lands, there was no authority to conduct a federal study of the middle segment, so it is not included in the alternatives.

State Scenic Designation for the Lower Klickitat Only. Alternative 2, discussed in detail below, would add the Klickitat River from Summit Creek down to the Columbia to the State Scenic Rivers Program. Under that alternative, the State would take the lead in managing the entire segment, including the lower Klickitat (the portion already added to the federal system). An alternative would be to have the state take the lead in managing the lower Klickitat only, and not the segments upstream from the federally-designated section. This alternative was not considered in detail because, from the standpoint of efficiency and effectiveness, the State of Washington expressed interest in river management only if the entire section of river (from Summit Creek to the mouth) could be included in the state program.

Alternative 2 But Without State Scenic Designation. An alternative that would meet the intent of Alternative 2, but would not add the lower Klickitat to the State Scenic Rivers Program, was discussed briefly. This was rejected because people agreed that in order for current management to be intensified—the goal of Alternative 2—a central coordinating body was needed to make sure that the necessary management activities actually occurred.

Management Designed to Create Highly Developed Recreation Opportunities.

Although the alternatives differ in the level and type of recreation facilities, information, access, and opportunities, no alternative calls for changing the lower Klickitat to a highly-developed setting with many facilities for visitor comfort, multiple new access points, or other characteristics that would encourage much higher use levels or radically different types of use than currently exist. No public or Task Force comments were received that favored such an approach to recreation management. The study team judged this to be inappropriate given the type of opportunities the lower Klickitat seemed best-suited to provide and the potential for impact to other valuable resources.



The upper end of the designated segment (view upstream from Highway 142 bridge at Pitt, RM 10.3).

of river corridor would be subject to Columbia River Gorge National Scenic Area (CRGNSA) guidelines.

As pointed out by many people at the public meetings, it would be incorrect to equate this alternative with inaction. The current situation can be difficult to describe because it is always changing. For example, Klickitat County recently revised the Shorelines Master Plan, which regulates activities within about 200' of each side of the river. The Columbia River Gorge National Scenic Area Commission (Gorge Commission) recently has proposed zoning for the lower 1.5 miles of the segment, which are included within the CRGNSA boundaries. These and other existing mechanisms such as the Forest Practices Act and county zoning ordinance are revised periodically.

2.3 Management Alternatives Considered in Detail

This section summarizes the intent, structure, and management actions that would be undertaken for each of the four alternatives considered in detail. Table 2-1 provides more detail on the alternatives, in a tabular format for easy comparison.

The Task Force was actively involved in developing two of the alternatives. One of these (#2) recommends that the lower segment be designated a State Scenic River (in addition to its federal designation) so it could be managed under the State Scenic Rivers Program. The other (#3) proposes that the river be managed by a cooperative committee consisting of the Forest Service, Klickitat County, the State of Washington, and the Yakima Indian Nation. Alternative #1, the no-action alternative required by NEPA, describes the current management situation on the lower Klickitat. The final alternative (#4) was developed by the study team to make sure that a reasonable range of alternatives was considered, as required by NEPA.

Alternative 1. This alternative describes the existing situation—what mechanisms currently are available to protect important river resources (Chapter 3 provides more detail on existing resource protection mechanisms and trends). This is the no-action alternative required by NEPA. Adoption of this management direction would mean that the management plan would consist of existing management mechanisms; no new programs would be created and there would be no coordinating body addressing the river corridor as a whole. The county, state, and federal governments and the Yakima Indian Nation would continue to exercise their existing authorities in the river corridor. Restrictions on land uses within the lower 1.5 miles

Resources in the study corridor currently receive some protection from a variety of county, state, and federal activities. The principal laws, policies, and programs protecting river corridor resources are described in Chapter 3 under "Land Use Regulations." The sub-basin planning process described under "Fish and Instream Resources" in Chapter 3 maintains and enhances anadromous fish; fish habitat improvement or enhancement programs are sometimes undertaken by various state and tribal agencies. There are no minimum flows established for fish or recreation established, and no water quality monitoring program other than occasional state testing.

Recreation and public access are provided by the county and state as described in Chapter 3 under "Recreation Opportunities and Public Access. Although numerous opportunities are provided, there currently is no coordinated management of recreational use or access and no process for determining capacity or regulating commercial use. The county sheriff is responsible for search and rescue efforts.

The river's free-flowing character is protected by the segment's designation under the Wild and Scenic Rivers Act. This designation precludes FERC from licensing hydropower projects and prohibits federal participation in other dams and water resource projects having direct and adverse impacts.

Alternative 2 (preferred). This is one of two alternatives that came out of the Task Force process. The goal of this alternative is to provide adequate resource protection while maintaining local control and minimizing effects on landowners and land use practices. All of the existing mechanisms described under Alternative 1 would continue, but would be augmented by increased recreation management, enforcement of existing regulations and coordination of river

management activities. In other words, current management would remain much the same, but would be intensified.

This alternative calls for adding the entire river from Summit Creek to the Columbia to the Washington State Scenic Rivers System (see Box 2-1). This would include the designated section of the lower Klickitat, the segment of the upper Klickitat that currently is being studied, and the section in between. The lower Klickitat would retain its federal designation. Management of the lower Klickitat Wild and Scenic River segment would be coordinated by the Washington State Scenic Rivers Program. The management team would be the Klickitat River Committee, composed of representatives of local, state, and federal governments, the Yakima Indian Nation, landowners, and river users.

After the river was added to the State System, the Forest Service would request that congress narrow the boundaries to a 1/4-mile strip of land on each side of the river, to be consistent with State law (See map 3-6). A primary management area would be established that conforms to the county's Shorelines Management Plan area (200' from the ordinary high waterline on each side of the river). This shorelines area would be the focus for most management activities. The uplands management area would extend from there out to the 1/4 mile boundary, consistent with the Washington State Scenic Rivers Program direction. The state system cannot control use of private lands and has no ability to condemn land if an activity is degrading river values. The main additional resource protection mechanism would be increased efforts to work with landowners to accomplish conservation goals. This would include encouraging voluntary resource protection efforts such as donating conservation easements (see Box 2-2), as well as providing information on tax incentives and possible sources for funding or technical assistance with forestry, agriculture, and other existing land use operations. In addition, water quality and quantity monitoring would improve, and cultural resources would be identified and protected.

State and private, non-profit organizations could be asked to conserve ecologically important areas. The state Department of Ecology could make the river a priority for monitoring water quantity and quality and establishing minimum instream flows.

The goal of recreation management activities would be to maintain existing recreational opportunities and coordinate planning and management of recreation use, rather than develop many new sites or add extensive new facilities that could change the nature of recreation currently provided. The part-time river ranger would coordinate those efforts.

Because the Forest Service has the ultimate responsibility for administering the Wild and Scenic lower Klickitat, it would maintain an oversight role, including monitoring of resource conditions, to ensure that river resources were adequately protected. This would include representation on the Klickitat

River Committee. The management plan (Appendix B) provides additional definition of this oversight role.

Alternative 3. This is the other alternative that came out of the Task Force process. Its goal is to maintain the river resources and character much as they are today, and its chief assumption is that significant additional actions are needed to accomplish this goal. The Forest Service, Klickitat County, Washington State, and the Yakima Indian Nation would form a Management Committee to implement the management plan, with recommendations from a citizen group. The boundaries would be the existing boundaries as shown in Map 3-1.

Box 2-1

Procedure for Adding the Lower Klickitat to the Washington State Scenic Rivers Program

For the Klickitat River to be included in the Washington State Scenic Rivers System, the state's Committee of Participating Agencies must first find it suitable. The Committee of Participating Agencies is composed of representatives from the state departments of Ecology, Fisheries, Wildlife, Natural Resources, and Transportation, the State Parks and Recreation Commission, the Interagency Committee for Outdoor Recreation, the Washington State Association of Counties, and the Association of Washington Cities. There are also two public members appointed by the governor.

The State Parks and Recreation Commission would then recommend designation, which would require an act by the state legislature. The bill could make inclusion of the Klickitat contingent upon adoption of the management plan developed during this EIS process. A strong level of support from local citizens and from the area's legislators would greatly enhance the chance that the river would be designated.

The Washington State Parks and Recreation Commission is the legal administrator of the Scenic Rivers Program. For each river included in the system, a Scenic River Council (composed of the Committee of Participating Agencies plus citizen representatives) acts as an advisory body to the Commission, which has veto authority (Starlund, 1990). In reality, the River Council has made administrative decisions, with approval from the Commission.

The Task Force agreed that no action affecting the middle Klickitat should be taken without involving residents of the middle segment, including holding one or more public meetings in the town of Klickitat.

All of the existing mechanisms described under Alternative 1 would continue, but would be supplemented by expanded regulations and management actions. The county would contribute toward additional resource protection by strengthening zoning and shorelines regulations, including an expanded river buffer, a 100-foot road setback, and a prohibition on building roads on slopes within the corridor that are 40 percent or greater or in areas where road cuts would be visually dominant from the river or major public roads. The federal government would supplement this by purchasing a limited amount of easements and/or lands to protect river corridor resources. This would include purchase of development rights (easements) or fee title for several potential building sites, 50 acres of rare plants, 200 acres of exemplary oak communities, and 200 acres of conifer stands.

Existing resource inventories would be supplemented by more-detailed collection of data on sensitive plants and plant communities, including Oregon white oak, significant wildlife species, and cultural sites. Site plans for any identified high priority cultural sites would be developed in cooperation with the Yakima Indian Nation. Water quality and quantity would be monitored and actions taken as needed to maintain existing water quality standards and flow levels. Landowners would be encouraged (and provided with federal funding) to make shoreline habitat improvements where possible.

A comprehensive archival inventory of known cultural sites would be conducted, with emphasis on traditional and spiritual use areas. This would be supplemented by on-the-ground survey of lands within the boundary, and an assessment of all known and suspected historic, pre-historic, spiritual, and traditional use sites for possible inclusion on federal or state historic registers.

Recreation management goals, similar to those described under Alternative 2, would be to maintain existing recreational opportunities. A full-time river ranger (and seasonal assistant) position would be established to assist and educate the public, enforce regulations, and assist the sheriff with search and rescue operations. A program to monitor the effects of recreation on social, physical and biological conditions in the corridor would be implemented.

The federal government could use its condemnation authority to restrict new uses to protect important resource values or provide recreation. However, condemnation would be utilized only as a last resort (when all other efforts to protect resources have failed). The federal government could not acquire through condemnation lands within an incorporated city, village, or borough which has a zoning ordinance in force that conforms with the purposes of the Wild and Scenic Rivers Act. The federal government could acquire state lands only by donation or exchange, and could acquire lands owned by Tribes or political subdivisions of a state only with the consent of the Tribe, county, or other landowner.

Box 2-2

Conservation Easements

The alternatives make several references to conservation easements and purchase of lands in fee title. When a parcel of land is owned outright it is referred to as being held in "fee title;" the owner has the right to manage it as he or she sees fit subject to existing zoning and other land use regulations. If the land is sold, the previous owner relinquishes all rights to determine how the land will be used in the future.

A conservation easement is a legal agreement made by a property owner. People may grant conservation easements for many reasons, including protection of their land from inappropriate development, without having to give up other rights that come with private ownership. By granting an easement in perpetuity, the owner is assured that the resource values of the property will be protected indefinitely, regardless of who might own the property in the future.

Granting a conservation easement does not necessarily mean that a landowner loses productive use of the land. The landowner can, for example, grant an easement that gives up the right to subdivide or build but does not affect timber harvest. Similarly, an easement could give up the right to clear-cut harvest but still allow selective cutting. Each easement's restrictions are tailored to the particular property, the interests of the owner, and the resources being protected. The rights that remain after granting an easement are specifically spelled out.

As a property right, an easement has value. The landowner may choose to donate this right or, alternatively, there may be situations were it is in the interest of a public agency or a conservation organization to purchase the easement. Granting an easement can yield tax savings. If the owner wishes to claim tax benefits, he or she must either donate the easement or sell it at below market value. The extent of the tax savings depends on the extent of the rights that are foregone. For example, a landowner will realize greater tax benefit from granting an easement on readily developable land than on lands where physical features or regulations make development unlikely.

Easements or recreation use agreements also may be granted to allow recreational access across private lands. In these cases, Washington law provides landowners with protection from liability.

The Forest Service has not initiated any new condemnation proceedings for either fee title or easements in any Wild and Scenic river corridor in the last 10 years. Previously, the Forest Service had acquired land or easements in seven Wild and Scenic river corridors. Of the 20,598 acres of land acquired in fee title, 656 acres were acquired through condemnation. Of the 20,174 acres of private land for which easements were purchased, easements on 4,655 acres were purchased via condemnation, usually because landowners used the process to establish easement price rather than because they opposed the easements.

Alternative 4. The overall management goal would be not just to maintain, but to enhance river corridor values, and provide opportunities for increased recreational use and development compatible with resource enhancement objectives. Federal acquisition of easements and lands in fee title would be the primary tool used to accomplish resource protection goals, rather than increased county regulations, so this would be the most expensive alternative.

This alternative was developed by Land and Water Associates to make sure that a full range of alternatives was addressed. One consideration in developing this alternative was that the county has expressed reluctance in assisting lower Klickitat management by strengthening zoning or shorelines measures, in part because residents would not receive compensation for the increased restrictions. Another consideration was that an alternative providing additional recreation opportunities was needed to make sure a full range of alternatives was considered.

As described under Alternatives 1 and 3, the existing boundaries would remain. The Forest Service would have responsibility for management, but would be closely guided by recommendations from a formal Advisory Committee operating under the Federal Advisory Committee Act. The Act requires that meetings be advertised in the Federal Register and specifies criteria for developing a balanced group membership.

The Forest Service would supplement voluntary resource protection measures by increasing the amount of land or easements purchased to protect resources. This would include purchase of easements or land in fee title for 100 acres of rare plants, 400 acres of exemplary oak communities, and 200 acres of conifer stands.

Landowner agreements, scenic easements, or land in fee title would be acquired to meet visual quality objectives on 30 potential building sites and two recreational vehicle areas. The Forest Service also would purchase development rights (easements) or fee title on about 20 potential building sites and development rights on 135 acres in the rural residential zone near Pitt.

Water quality and quantity would be monitored and actions taken as needed to maintain existing water quality standards

and flow levels. Landowners would be encouraged (and provided with federal funding) to make shoreline habitat improvements where possible.

A comprehensive archival inventory and oral history of known cultural sites would be conducted, with emphasis on traditional and spiritual use areas. This would be supplemented by onthe-ground survey of lands within the boundary, an assessment of all known and suspected historic, pre-historic, spiritual, and traditional use sites for possible inclusion on federal or state historic registers, and recommendations for protection of all significant cultural sites.

Recreation management would be designed to accommodate higher levels of recreational use than under Alternatives 2 or 3. This would include increased public access, facilities (adding two overlook points and improving existing roadside pullouts/parking areas along Highway 142), and placement of interpretive signs and/or displays. In particular, people would have a better opportunity to learn about the dip-net fishery.

2.4 Tabular Presentation of Alternatives

As required by NEPA, Table 2-1 presents the alternatives in comparative form. Each of the alternatives would be accompanied by a program monitoring progress toward resource goals.

Table 2-1 Lower Kickitat Management Plan Alternatives

Alternative 4	Enhance river corridor resource values through federal purchase and management of easements and lands in the corridor. The lands and easements acquired would be used to enhance scenic, fish, wildlife, vegetation, and recreational values. The public would be provided with additional opportunities to recreate and benefit from the river corridor.	Same as Alt. 1.
Alternative 3	Maintain the character of private and public land in the river corridor close to the way it appears today. Provide long-term protection of significant river corridor resources with a combination of county, state, and federal actions that maintain existing resource uses and protect private property rights to the extent possible.	Same as Alt. 1.
Alternative 2 (preferred)	Maintain the existing blend of land uses within the river corridor. Focus attention on the dual objectives of preserving private property rights and protecting significant natural resources. This would be accomplished through a combination of interagency coordination, fine-tuning and enforcement of existing regulations, and voluntary actions by landowners. Local control over private property land use decisions would be maintained. Public lands would be maintained. Public lands	To protect the outstanding values, which are all instream or along the streambanks, the river corridor would be divided into two areas: shorelines and uplands. The shorelines area would extend 200 feet back from each bank's ordinary high water mark (the area currently covered in the county shorelines management plan). This shorelines area would be the primary focus of river management actions. The uplands area would include lands on both sides of the river that are outside the 200 foot shorelines area but within 1/4 mile of the river, consistent with boundaries as specified by the Washington State Scenic Rivers Program.
Alternative 1	Maintain the existing level of resource protection, allowing current land uses and river management practices to continue. The management plan would contain no new mechanisms to provide additional resource protection, coordinate river management, or manage recreational use.	Existing Wild and Scenic boundaries as determined by the Forest Service average slightly over 1/4 mile on each side of river (420 acres per mile of river).
	Intent	Boundaries

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Administration	The county, state, and federal governments would continue to exercise their existing authorities in the river corridor, as described in Chapter 3 and below.	The river from Summit Creek to the confluence with the Columbia would be added to the Washington State Scenic Rivers System. Federal designation of the lower river as a National Wild and Scenic River would be retained. The Secretary of Agriculture and the state would agree that management coordination on the lower river would be headed by the state. Forest Service oversight would guarantee that acceptable standards of resource protection were met. A Klickitat River Committee would brovide guidance for river management activities. The committee would be composed of individuals representing the state, the Forest Service, the county, the Yakima Indian Nation, landowners, and river users. Implementation would largely be the responsibility of public agencies represented on the coordinate committee and agency activities. A part-time river ranger would assist with monitoring and enforcement activities, serve as a contact person for landowners and recreation visitors, and perform related management duties.	The Forest Service, Klickitat County, Washington State, and Yakima Indian Nation would be represented on a Management Committee. The Committee would implement the management plan with recommendations from an informal citizen advisory group. A full-time river ranger and a seasonal assistant (Forest Service employees) would conduct monitoring and enforcement activities, serve as contact people for landowners and recreation visitors, and perform related management duties.	The Forest Service would implement the management plan, with recommendations from a formal Advisory Committee of landowners and people representing the county, state, Yakima Indian Nation, and other interests. The Advisory Committee would operate under the provisions of the Federal Advisory Committees are very active during the first 1-3 years of plan implementation, after which they are convened as needed to make recommendations on key issues that surface. River manager and seasonal assistant would perform duties as under Alt. 3.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
General Approach to Resource Protection	Existing laws, programs, and policies include the National Wild and Scenic Rivers Act, Shorelines Master Plan (with proposed revisions), county zoning ordinance, the state Forest Project Approval process, the Northwest Power Planning Council's (NPPC) Protected Areas Program, the sub-basin plan for anadromous fish, and, for the lower 1.5 miles of the river, the Columbia River Gorge National Scenic Area (CRGNSA) management guidelines. BLM lands administered by Forest Service are managed under 1987 Spokane Resource magement plan.	There would be increased protection of resources on state-owned lands, increased coordination and enforcement of county and state activities, and increased efforts to work with landowners to accomplish conservation goals. These would include encouraging voluntary resource protection efforts such as donating conservation easements, as well as providing information on tax incentives and possible sources for funding or technical assistance with forestry, agriculture, and other existing land uses. State and private non-profit organizations could be asked to assist in conserving ecologically important areas.	The county would strengthen existing regulation, add new ones, and increase enforcement to provide stronger resource protection (see description under Land Use Regulations, below). The Forest Service would work with state agencies to encourage management consistent with this plan and to increase coordination and enforcement efforts. The Forest Service would supplement county and state efforts by purchasing conservation easements or onservation easements or stock in Alt. 2.	The primary resource protection mechanism would be federal acquisition of lands in fee title or casements. The Forest Scrvice would work with the state and county to encourage management consistent with this goal. The county generally would not be asked to strengthen existing Shorelines or zoning regulations.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Guidelines for Acquisition	No state or federal acquisition of lands or eascments within the corridor.	The state could purchase a limited amount of land or easements to provide public access. Federal funds would be used. Voluntary donations of easements to preserve natural resource values would be encouraged. In accordance with the Washington Scenic Rivers Act the state would have no condemnation authority. Forest Service authority to use condemnation would be confined to a last resort option.	The Forest Service would acquire a limited amount of lands and/or easements to achieve visual quality objectives, protect other resource values, and provide public access. Lands or easements would be acquired at fair market value based on the following criteria: likelihood of new development or land use that would be incompatible with resource protection; failure of other mechanisms (such as voluntary actions by landowners or county regulation) to accomplish resource protection; and availability of new opportunities for purchase from willing scllers (such as abandonment of rights-of-way). Approval of the Management Committee would be needed for any acquisition. The Forest Service would have condemnation authority but would use it only as a last resort after all other resource protection measures have failed, or when requested by landowners to help determine fair market	The Forest Service would use acquisition of lands and/or easements as a principal tool to achieve visual quality objectives, protect other resource values, and provide public access. The amount of lands and/or easements acquired would exceed that of Alt. 3 but acquisition criteria would be the same. The advisory committee would be consulted prior to initiating any acquisition but the final decision would be made by the Forest Service. Condemnation authority could be used as in Alt. 3.

	Alternatives		
Alternative 4	Dams: Same as alt. 1.	Shorelines: New rip rap, concrete retaining walls, exposed rock gabions and other similar structures would not be allowed except for emergeney reconstruction. Same river buffer as in Alt. 3, except that it would be maintained by federal acquisition of easements or lands in fee title.	Water Quality and Quantity: Same as Alt. 3
Alternative 3	Dams: Same as Alt. 1.	Shorelines: Stream bank erosion control, diversions and other new instream struetures would be managed as in Alt. 2 except natural methods of bank stabilization (bioengineering solutions) would be required under most eircumstanees. Federal funding would be available for shoreline improvements. The county would strengthen the Shorelines Master Plan to widen the river buffer to include: existing woody vegetation up to 100' from the river bank between Wheeler Creek and RM 8.8 on the west bank and the area between Highway 142 and the river south of RM 9.2. (As intended by the county ordinance, the river buffer would be an area where vegetation would remain largely undisturbed. Minor modification could be allowed under special circumstances.)	Water Quality and Quantity: Federal funding would be available to monitor and maintain water quality and quantity, including possible future purchase of water for instream flows if substantial new water withdrawals are likely.
Alternative 2 (preferred)	Dams: State designation would add state-level dam protection from Summit Creek to the mouth. Federal prohibition on dams would be retained as would be retained as Areas Program status.	Shorelines: Stream bank erosion control, diversions and other new instream structures would be allowed if they enhance river resources or reduce existing impacts (for example, consolidation of diversion points). Natural methods of bank stabilization (bioengineering solutions) would be strongly ereouraged. Activities related to Native American dip-net fishing would not be affected. Vegetation and Wildlife. Cregon white oak is recognized as a significant species in the river area. The eurrent effort to develop an oak conservation plan would continue. The River Committee would work to coordinate river management with the oak plan. Landowners and ageneies would be encouraged to make shoreline habitat improvements where possible (for example, planting vegetation in riverbank gabions). Same Shorelines Master Plan provisions as Alt. 1.	Water Quality and Quantity: State DOE would monitor water quality and quantity and establish minimum instream flows. Existing water rights would not be affected.
Alternative 1	Dams: Dams and other federal water resource projects adversely affecting river resources are prohibited by the Wild and Scenic Rivers Aet. Hydropower dams are also prohibited by the NPPC Protected Area Program.	Shorelines: Hydraulie Project Approval is required for stream bed or bank alteration (ean be refused or made eonditional based on impaets to fish). The eounty's 1990 Shorelines Master Plan requires a 100' structural set back from the river (50' at Lyle); limits timber harvest within the shorelines area (200') to 30% of the merchantable stems every ten years; and ereates a natural zone within 50 feet of the river in which most uses are prohibited, and timber harvest is limited to one 30 percent partial eut within the next 10 years.	Water Quality and Quantity: No minimum flows for fish or recreation established; no monitoring program other than occasional state testing.
	Instream and Shoreline Resources		

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Instream and Shoreline Resources (continued)	Fish: The recently adopted subbasin plan protects anadromous fish. The plan provides for habitat improvement and new hatchery facilities.	Fish: Similar to Alt. 1 Creel census to be conducted regularly as part of recreation management and monitoring would provide the state with better information on fishing pressure.	Fish: Same as Alt. 2.	Fish: Same as Alt. 2.
Vegetation and Wildlife	State and federally managed lands provide some protection for vegetation and wildlife values. Resources on private lands are regulated by existing laws, policies, and programs. Reconnaissance-level data exists for cultural resource sites and rare plants and wildlife; detailed inventory data exists for forest types. State and federal agencies and private organizations are cooperating to develop strategies to conserve Oregon white oak. The Washington Department of Wildlife is conducting an extensive survey of oak stands in the region.	State agencies would be provided with funding to conduct moredetailed inventories and protection of rare plants, Oregon white oak communities and habitat for threatened, endangered, and sensitive wildlife species. State agencies also would develop a program to conserve Oregon White Oak and rare plants. The county would be encouraged to include lands managed for oak or rare plant conservation in the Current Use Tax Program (under the Open Space classification) for reduced property taxes.	Same oak conservation plan provisions as in Alt. 2. The cooperative management committee would take the lead in promoting voluntary programs to protect vegetation and wildlife resources. Federal funding would be available to conduct resource inventories and purchase casements or land as follows: 50 acres to protect rare plants (plus additional funding for fcneing around rare plant areas where appropriate); 200 acres to protect exemplary oak communities; and 200 acres to retain the visual qualities of identified conifer stands adjacent the river (rare plant and oak sites would be identified following the planned detailed inventory). The open space program would be expanded as in Alt. 2.	Same oak conservation plan provisions as in Alt. 3. The Forest Service would take the lead in promoting voluntary vegetation and wildlife protection programs. Federal funding would be available to conduct resource inventories and purchase easements or lands as follows: 100 acres to protect rare plants (plus additional funding for fencing rare plant areas where appropriate); 400 acres to protect exemplary oak communities; and 200 acres to preserve identified conifer stands (also protecting views to and from the river).

Alternative 4	Traditional Uses: Same as Alt. 3.	Inventory/Evaluation: Federal funding would be made available to compile a comprehensive archival inventory and oral history of sites with emphasis on traditional and spiritual use areas and to conduct onthe-ground surveys of lands within the corridor. All known and suspected historic, pre-historic, spiritual, and traditional use sites would be assessed for possible inclusion on federal or state historic registers.	Resource Protection: Significant sites would be placed on state or federal registers. All significant cultural sites would be protected through acquisition by fee-title or easement or through other appropriate long-term strategies. Sites would be monitored for compliance.
Alternative 3	Traditional Uses: Access would be as in Alt. 1. Native Americans would be provided with staff and funding to develop a site management plan for the Klickitat gorge. A program to decrease accidents and drownings of dipnet fishermen would be implemented, and technical assistance and funding provided to the Native American search-andrescue team.	Inventory/Evaluation: Federal funding would be used to conduct an archival inventory of sites within the boundary and an onthe-ground survey of public lands in the corridor. Sites that are high priority for protection would be identified.	Resource Protection: Site plans would be prepared for sites found to be high priority for protection in cooperation with the Yakima Indian Nation. Plans would include monitoring and, on a limited basis, acquisition.
Alternative 2 (preferred)	Traditional Uses: Same as Alt. 1, except a program to decrease accidents and drownings of dipnet fishermen would be implemented in cooperation with the Native American search-andrescue team.	Inventory/Evaluation: Federal funding would be used to conduct an archival inventory of sites within the boundary and an onthe-ground survey of public lands in the corridor. Sites that are high priority for protection would be identified.	Resource Protection: Site plans would be prepared for sites found to be high priority for protection in cooperation with the Yakima Indian Nation. Plans would include monitoring and, on a limited basis, acquisition.
Alternative 1	Traditional Uses: Native Americans have treaty rights that provide access for fishing and partial access for other uses. Shore lands along the dip-net fishing area are mostly in public or Native American ownership. Safety of dip-net fishermen is a concern as numerous drownings have occurred.	Inventory/Evaluation: Potential historic sites are evaluated on a case-by-case basis as development projects are proposed. Sites potentially eligible for state or federal historic registers are evaluated further and designated as warranted. No other surveys are undertaken.	Resource Protection: No registered historic sites; sites registered in the future will be partially protected by state or federal law. No acquisition is undertaken to protect historic resources. Indian graves are protected by state law. (Interpretation of cultural resources is discussed under recreation.)
	Traditional Uses and Historic Resources		

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Recreational Opportunities and Public Access	Goals: Continue existing management practices, with no coordinated management of recreational use and public access.	Goals: Maintain and enhance existing recreational opportunities (roaded natural) and limit the impacts of recreation on river resources and private lands. Do not attempt to increase demand for river recreation through active promotion or advertising.	Goals: Maintain and enhance existing roaded natural); similar goals as Alt. 2 but with additional federal funding and management authority to guarantee planning, management and acquisition activities.	Goals: Provide a roaded natural experience (with higher use levels and additional recreational development). The greater level of federal ownership of lands in the corridor would allow additional recreational opportunities to be developed in the future. Promote the river so more people can take advantage of the recreational opportunities available.
	River Access and Facilities: Two county parks at RM 8 (primitive sanitation facilities) & RM 10.2 (unimproved boat access, no facilities), one WDW/IAC primitive recreation site at RM 4.9 (unimproved boat access, sanitation facilities, unimproved camping area), two access sites on private land at RM 8.1 and RM 5.5 (unimproved boat access, no facilities). WDW/IAC site requires visitors to have either a hunting, fishing, or conservation license (but not enforced). Sites generally are not maintained except for periocic litter pickup at WDW site. Highway 142 is used for fishing access at many locations including near RM 1.	River Access and Facilities: Provide sanitation and parking facility improvements and crosion control measures at both county parks; provide primitive boat launch, takeout at RM 10.2 county park; attempt to obtain legal access to private sites at RM .8, RM 5.5, and RM 8.1 (using recreation use agreements or acquisition on a willing seller basis); seek LWCF funding to improve camping opportunities at the WDW site at RM 4.9; encourage Department of Transportation to provide limited improvements at two roadside pullouts between RM 1 and 3.5.	River Access and Facilities: Provide sanitation and parking facility improvements and erosion control measures at both county parks; provide primitive boat launch/lakeout at RM 10.2 county park; obtain legal access to private sites at RM 5.5 and RM 8.1 (using acquisition on a willing seller basis); improve camping opportunities at the WDW site at RM 4.9; provide limited improvements at two roadside pullouts between RM 1 and 3.5. Improve trail to river for fishing at RM 1.	River Access and Facilities: Alt. 3 with site expansion of the WDW site and county park through purchase of adjacent lands; additional improvements and site hardening measures (such as parking barriers and campsites at WDW site, limited paving and revegetation at existing sites, and sanitation facilities at fishing area at RM 1). The potential for trails along the river and other recreational opportunities would be explored in the future.
	Public Information: Very limited; single informational sign at one county park and WDW site; no additional efforts to interpret resources or to inform people that the river is designated as a National Wild and Scenic River.	Public Information: Provide limited number of additional signs at parks and WDW site; develop and disseminate information addressing resource protection, how to deal with accidents and emergencies, and respect for tribal and priwate lands.	Public Information: Alt. 2 plus additional signs, including Wild and Scenic River signs at each end of the river corridor. Interpretive brochure would provide information on resources along the lower Klickitat, including dip-net fishing.	Public Information: Alt 3. plus the development of an interpretive plan and greater on-site signing and information. This would include a viewing site and display on dip-net fishing, located to avoid disturbance of dip-net anglers and prepared in cooperation with the Yakima Indian Nation. The interpretive plan would use information from the monitoring effort to provide desired information to recreation visitors.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Recreational Opportunities and Public Access (continued)	Regulations: No regulation of on- river or access site noncommercial recreational use, although WDW site is checked by game wardens regularly, primarily to check fishing licenses. As of July 1, 1990, the Forest Service is requiring commercial users (guides and outfitters) to pay a fee and obtain a Forest Service permit to begin or continue commercial activities. For the 1990 use season, these permits are temporary and are available to any outfitter meeting permit requirements, which include an approved operating plan, State of Washington license, insurance, and a performance evaluation. If necessary sometime in the future, the outfitter permit system could be used as a way to regulate the number of outfitters using the river. Commercial use of the river currently is limited primarily to salmon and steelhead fishing, with only a few outfitters using the river.	Regulations: Establish no regulations on noncommercial use until a minimum of one full season of monitoring social and physical conditions is completed; if management action is called for based on evidence of or potential for undesirable impacts to recreation experiences, the landscape, or private lands, enact indirect (soft) measures such as visitor education and information to accomplish goals without limiting use levels or enacting regulations which would unnecessarily restrict visitor freedom. If these indirect measures are not successful, enact more direct regulations that address the problems (such as use level limits or bans on certain types of behavior such as campfires). Direct actions are not anticipated to be needed in the short term because there currently is little evidence of use-related impacts. The permit system for outfitters would be the same as under Alt. 1.	Regulations: Similar to Alt. 2 in general management approach. Motorized boating would be limited to the pooled section of river below the Fisher Hill Bridge. Greater management presence due to full-time river manager and seasonal river ranger would allow additional visitor contact and enforcement of any needed regulations, which may be needed sooner (than under Alt. 2) because of this alternative's greater emphasis on resource protection. However, the river appears to be well below cap. teity and indirect management actions should be effective for at least the short term. The permit system for outfitters would be the same as under Alt. 1.	Regulations: The increased number of visitors may require a greater level of regulation and enforcement to keep the impacts of recreational use on other river resources and land uses at acceptable levels. Site hardening, information and education programs, and additional facilities should help to mitigate potential impacts such as trampling of vegetation or the potential for trespass, littering, or wildfires. Same regulation of motorized use and boating in the gorge area as under Alt. 3. Direct regulations such as use limits would be implemented only as a last resort because the goal is to provide more people with the opportunity to recreation on and along the river—but not at the expense of other important resource values. Same permit system for outfitters.
	Monitoring: No systematic monitoring of recreation use or physical, biological, or social conditions that are present. Limited use level information and no information about trends in use, visitor needs and preferences, or the relationship between use patterns and the physical, biological, and social conditions in the river corridor. Existing information on recreational use is not adequate to provide a basis for making many critical management decisions.	Monitoring: Monitor social, physical, and biological conditions and how recreational use is affecting these conditions (see detailed descrption in section 2.5).	Monitoring: Use federal funding and personnel to implement a comprehensive monitoring program to establish relationships between recreational use patterns and desired physical, biological, and social conditions (see detailed descrption in section 2.5).	Monitoring: Same as Alt. 3.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Recreational Opportunities and Public Access (continued)	Safety: Sheriff is responsible for search and rescue efforts, with some limited outside funding.	Safety: Same as Alt. I with potential to seek additional funding to provide technical assistance to sheriff's safety program and improve coordination with volunteer search and rescue efforts.	Safety: Similar to Alt. 2 with provision of federal funding for assistance with sheriff's safety program to ensure development of safety plan to establish response protocol, provide safety training and coordination with the local Native American search and rescue volunteer group.	Safety: Same as Alt. 3.
Visual Resources	Columbia River Gorge National Scenic Area (CRGNSA) protects scenic quality of the lower 1.5 miles of river corridor (with the exception of the Lylc Urban Area). Under proposed regulations, new residential and commercial development would not be allowed in the bulk of this area; most other land uses would be restricted, except forest practices. No other coordinated management of scenery exists for the rest of the river corridor (although there are some aesthetic considerations in the county's SMP revision).	The visual quality objective would be partial retention—to keep new land uses and activities visually subordinate to the existing landscape. The county's ban on building roads on steep slopes within the river canyon would meet this goal. State agencies would consider scenic impacts when planning activities on state lands and landowners would be encouraged to consider scenic values in their land use and property management activities. CRGNSA areas managed same as under Alt. 1.	The visual quality objective of partial retention would be accomplished through strengthened county regulations, landowner agreements and purchase of easements or lands. All new land use activities and development would be visually subordinate to their landscape setting, except areas with existing visually dominant development; new development in these areas would be compatible with landscape settings. The Management Committee would seek to mitigate the visual impacts of several existing structures through landowner agreements. CRGNSA areas would be managed as under Alt. 1.	The visual quality objective would be partial retention and enhancement of scenic quality through landowner agreements and acquisition of easements and acquisition of easements and land. All new land use activities and development would be visually subordinate to their landscape setting. No new development would be allowed between the highway and river. The Forest Service would seek to mitigate the visual impacts of several existing structures, using acquisition as a last resort. CRGNSA areas managed same as under Alt. 1.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
General Approach to Land Use Regulations	Exising land use regulation mechanisms. No special efforts to coordinate regulations or information about them within the river corridor. CRGNSA regulations apply to lower 1.5 miles of river.	Coordination of agencies with jurisdiction would be improved. On state lands, state agencies would consider the impacts on river values of any activities planned for the river corridor. For private lands, existing voluntary programs would be promoted to help keep lands in forestry and agriculture (such as current use tax incentives and easement donations). Landowners would be provided with information on current regulations and technical and financial assistance available to landowners. CRGNSA regulations same as under Alt. 1. If land use conflicts arise that cannot be resolved through these mechanisms the Klickitat River Committee would work with the party proposing the development or activity in an effort to reach a mutually agreeable solution. If no other solution is possible lands or development rights could be acquired. This action would require the approval of the River Committee.	Alt. 2 with increased county regulation of new land uses (existing land uses would continue) as described below. Federal purchase of easements or land as needed to insure maintenance of the existing character and qualities of the river corridor. CRGNSA regulations same as under Alt. 1.	Alt. 3 without increased regulation by the county. Most existing land uses would continue, but uses adversely affecting the natural character of the river could be phased out through purchase from willing sellers. New uses would be allowed only if they were compatible with maintaining a rural, natural corridor. CRGNSA regulations same as under Alt. 1.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Residential and Commercial Development	Development would be allowed subject to existing county zoning and Shorelines Master Plan. This includes a 20-acre minimum lot size in most areas and a 100 river setback; commercial uses may be conditionally allowed outside of the shorelines area. The draft SMP revision requires a minimum 660' river frontage for most of the length of the segment for newly divided lots, and prohibits commercial development outside of Lyle. CRGNSA proposed zoning prohibits most development outside the Lyle Urban Area.	No new regulations, but there would be increased monitoring, enforcement and coordination of existing regulations. Clustering of new structures would be encouraged. Landowners would be encouraged to conserve river values and would be provided with educational materials that could be used when building or modifying homes.	The county would strengthen zoning and SMP regulations as follows: require a minimum 100′ road setback (this could be increased if necessary for screening houses from the highway and river); reduce the rural residential area at the north end of the corridor to approximately the size of the existing community at Pitt; regulate road construction as specified below; require retention of vegetation for new residences; and establish additional gudelines on granting of conditional uses. No zone changes inconsistent with this plan would be allowed. The Forest Service would supplement increased county regulation by: seeking landowner agreements or purchasing scenic easements to reduce visual impacts of existing and potential development at 12 sites and at Steelhead Run; purchasing development rights (easements) or fee title on 8 potential building sites from willing sellers.	Residential development would be limited by a federal acquisition program. The Forest Service would: obtain landowner agreements or scenic easements to screen development on about 30 potential building sites; acquire development rights or fee title on about 20 potential building sites, plus the 135-acre area near Pitt zoned rural residential; obtain landowner agreements, easements or fee title to reduce visual impacts of RVs at Steelhead Run and Wheeler Creek and of several existing permanent structures elsewhere in the corridor.

	Alternative 1	Alternative 2 (preferred)	Alternative 3	Alternative 4
Agriculture and Grazing	The SMP limits agricultural uses to non-intensive grazing and requires a 100' setback from the river for new structures. Intensive agricultural practices are allowed elsewhere in the corridor.	Same as Alt 1. Plus state and federal agencies would provide education and assistance to enable landowners to voluntarily reduce impacts of existing practices. Landowners would be encouraged to cluster new farm and ranch structures with those already in existence when possible.	Alt. 2, plus a 100' road setback for new agricultural structures. Grazing use would be monitored to ensure compliance with any applicable SCS grazing plans. Funding would be provided for fencing or other cattle control measures to protect sensitive areas (such as rare plant sites or riparian areas susceptible to overgrazing).	Same as Alt. 3.
Forestry	Forest practices are regulated by the state Forest Practices Act (including a managed river buffer); proposed SMP revision restricts timber harvest within 200' of the riverbank to 30 percent of the merchantable stems every 10 years, and within 50' of the riverbank to a one-time 30 percent partial cut within the next 10 years.	Landowners would be encouraged to design and practice logging activities to conserve river values. An Oak Conservation Plan would be implemented as described under "Vegetation and Wildlife."	Same as Alt. 2, plus timber harvest would be subject to a widened buffer zone and purchase of conservation easements as specified under "Instream Resources" and "Vegetation and Wildlife" above.	Same as Alt. 3.
Roads and Bridges	The county establishes requirements where private roads meet public roads; no restrictions on bridges.	New bridges would not be allowed (except for reconstruction at existing sites). County zoning would prohibit new roads on steep slopes (greater than 40%) between the canyon rims.	The county would prohibit building roads within buffer, on slopes within the corridor that are 40 percent or greater, and in locations where cut banks would be visually dominant from the river or highway. No new bridges could be constructed (except for rebuilding at existing sites).	Same as Alt. 3.

Table 2-1 (continued). Summary of Estimated Costs Associated With Each Alternative

		Recreation		Resource Protection		Other initial	Total	Annual
	Acquisition and Easements	Facilities	Monitoring/ Site Design	Acquisition	Studies/ Inventories³	Costs ⁴		Cost
Alternative 2 ¹ (preferred)	Included Under Facilities	\$177,000	\$110,000	530,000°	\$210,000	\$245,000	\$1,272,000	\$105,000
Alternative 3 ²	\$12,000	\$77,000	\$90,000	\$732,000	\$210,000	\$105,000	\$1,326,250	\$105,000
Alternative 4 ²	\$12,000	\$215,000	000'06\$	\$2,112,000	\$165,000	\$55,000	\$2,649,000	\$120,000

- * Costs associated with Alternative I are difficult to estimate because they are part of existing budgets and not dedicated to the river corridor. No acquisition programs exist currently.
- I The Forest Service would contribute 100 percent of one-time and annual costs, for the initial 3 years. After that, service would share costs with to other managment partners.
- 2 The Forest Service would contribute 100 percent of one-time and annual costs.
- 3 These costs include: an inventory of rare plants, plant communities and wildlife habitat; development of an oak conservation plan; developing water quality and quantity monitoring program; and inventory of cultural sites.
- 4 These costs include a shoreline improvement fund available to landowners, payments to the county for setting up its initial participation in river management, resource protection fund (Alt 2), and interim management costs.
- 5 These are the estimated annual costs for each of the first three years of river management, after which the estimates would change. Costs included are monitoring activities, site maintenance, and continuation of the recreation use study.
- 6. This money would be made available for easements and/or land purchase as deamed necessary by the River Committee.

2.5 Monitoring

Introduction. Section 10(a) of the Wild and Scenic Rivers Act states,

Each component of the national wild and scenic rivers system shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system, without ... limiting other uses that do not substantially interfere with public use and enjoyment of these values.

Federal guidelines interpret this to mean that management should ensure "nondegradation and enhancement" of designated river corridors. To ensure that management actions achieve the desired results, a program of monitoring and evaluation is needed. To be effective, such a program must consider both the land management activities that might occur and the resource values that are to be protected and enhanced.

Under the current situation (Alternative 1), monitoring of a variety of land use and resource factors is done by county, state, and federal agencies as part of their normal management activities. The county, for example, monitors compliance with zoning, while the Washington Departments of Wildlife and Natural Resources respectively monitor compliance with the state's hydraulics code and forest practices act. Currently monitoring is seldom systematic and often hampered by a lack of funding.

Because of the Wild and Scenic designation, the federal government would have the ultimate authority for monitoring to make sure resources are being protected.

Following is a discussion of monitoring activities that likely would take place regardless of management alternative. The management plan (Appendix B) incorporates monitoring objectives and actions for the preferred alternative (Alt. 2).

Land Management Activities. In the foreseeable future, forest management, cattle ranching, and residential/ recreational development are the land management activities that appear most likely to occur along or near the lower Klickitat. The purpose for monitoring these uses of the land is to determine the extent to which they are compatible with identified significant river resources. The emphasis of this monitoring would be on landscape change due to new uses, rather than existing uses. It also would be important to monitor the effects of land uses on each other, because conversion of forest or agricultural land is a concern of many.

Several parties, including the county and at least three state agencies, are now involved with monitoring of timber harvest, residential construction, and agricultural practices. As descrived in Appendix B, A cooperative agreement among these parties would outline procedures for making monitoring more systematic and efficient. The River Committee also would monitor applications for timber harvest permits, zone

changes, and other land conversions, evaluating these according to river management plan goals.

All of the alternatives include the use of conservation easements for resource management. To be successful, a conservation easement program must make provisions for monitoring. Monitoring of easements is the responsibility of the party holding the easement, although arrangements could be made to have this task performed by others; the Forest Service would likely have a major role. Monitoring would require at regular inspections to make sure the terms of the easement were being followed.

Instream Resources. The Forest Service and others involved in management of the river would monitor implementation of state and federal programs that regulate dam construction, bank alteration, and other potential impacts to the free-flowing nature of the river. A streamflow monitoring program would be developed in coordination with the Washington Department of Ecology. This would include evaluations of upper river and tributaries that contribute to the flow through the lower river. A water quality monitoring program would be implemented, again through coordination with DOE and/or the Soil Conservation Service. The Forest Service currently is developing a framework for evaluating the appropriateness of proposed instream & streambank modifications based on their impacts to free-flowing character.

Fish. Anadromous fish enhancement activities taken in support of the Klickitat Sub-basin Plan would be closely monitored by fisheries biologists from participating agencies and the Yakima Indian Nation. Fish production and habitat quality would be the basic measures for evaluation. For resident fish, the Washington Department of Wildlife would be requested to determine the condition of resident fish populations and habitat in the lower Klickitat using standard techniques. The factors selected could then be used to monitor changes to fish populations and habitat overtime.

Vegetation and Wildlife. Annual monitoring of endangered, threatened, or sensitive plants and animals would be initiated. This would include reviews of both the species and their habitat and would be performed in cooperation with appropriate state agencies. Use of the corridor by big game and furbearers would be monitored using existing information as a baseline. The emphasis would be on identifying any effects of land use conversion. The sophistication of these efforts would depend on the level of funding available.

Cultural Resources. Development projects that may require substantial ground disturbances would be evaluated on a case-by-case basis for possible impact to recorded historic and prehistoric properties. This evaluation would typically be funded by the party proposing the development under the guidance of the Washington Office of Archaeology and Historic Preservation. Recorded sites also would be monitored on a regular basis by the river management team to determine changes over time. Techniques for this would likely include

the development of a photographic record. Changes would be evaluated for potential adverse effects and, as necessary, mitigation measures would be initiated.

Monitoring of the Klickitat gorge would focus on ensuring continued opportunities by Native Americans to access traditional dip-net fishing areas. A secondary objective would be to ensure that surrounding land uses continued to be compatible with the area's historic and cultural significance. Consistent with the USDA policy of government to government relations, any monitoring of the Klickitat gorge would be done in cooperation with the Yakima Tribal Council.

Recreation. Better information on recreational use is needed. Right now, all that exists is rough estimates of recreational use patterns; more accurate information is needed on how many people use the lower Klickitat river corridor for recreation, as well as more information on the timing, distribution, and impacts of recreational use.

In addition, developing objectives and monitoring their attainment requires information about the people who visit the lower Klickitat, including why they visit the river, what types of experiences they have, and their views on what recreation managers could do to improve the quality of recreation opportunities. Creel information could be collected from anglers and provided to the Washington State agencies to help manage sport fishing. A site monitoring program would be instituted to measure recreation site wear and tear, such as amount of bare ground at use areas, or litter. A record would be kept of all incidents (such as trespass or vandalsism) reported by landowners. Traffic counters would be used to measure use levels at public access points.

A year-round visitor survey would be undertaken to learn more about recreational use and visitors. The survey would be repeated as needed in subsequent years as recreational use changes. The river manager would conduct less-formal monitoring of other characteristics as part of his or her regular duties.

Visual Quality. Visual quality would be monitored in terms of the objectives set for river corridor management. Monitoring would address both major changes and incremental changes and would focus on views from the river, the highway, and specific public use sites. Field checks would be conducted for proposed projects with a high potential for adversely affecting significant views. Photography would serve as the principal means for establishing a record of changes in visual quality over time. Photo and/or video documentation would be executed according to a prescribed program which specifies the type, location, and frequency of photo and/or documentation activities. Baseline photo documentation could include photos to or from key locations, aerial photos which emphasize land use change, and videotaping of sequential experiences, such as boating or driving.



CHAPTER 3

Affected Environment



The Klickitat over valley winds up from the massive Columbia. Highway 142 bridge at mouth is at bottom center, just to the left of the town of Lyle.

This chapter first describes the regional setting and history of the lower Klickitat. The rest of the chapter provides an overview of the physical, biological, social, and economic resources of the river corridor. This discussion includes land ownership patterns, land uses, and the existing regulations governing land uses. Any resources found to be outstanding are highlighted and described in the accompanying boxes.

3.1 Regional Setting

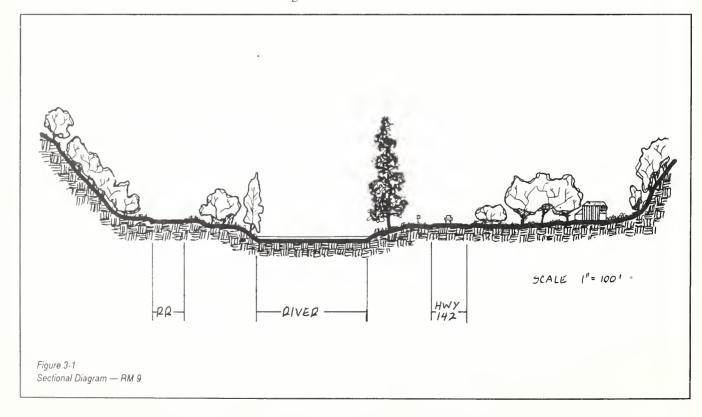
The Klickitat River is located in south-central Washington State. From its origin in the high country of the Yakima Indian Reservation, the river flows generally south for 96 miles, meeting the Columbia in the Columbia River Gorge. This remarkable natural feature has contributed much to the Klickitat River's biological diversity and rich cultural history.

The 1,300 square-mile Klickitat drainage incorporates portions of two major physiographic zones, the Cascade Mountain Range and the Columbia Basin. As the river descends over 5,000 feet, it passes through many diverse habitats and forest types. Tableland topography characteristic of the Columbia Plateau, with its grasslands and oak woodlands, is most evident on the east side of the river. To the west, the river's banks rise to meet Cascade foothills, covered with pine and fir forests.

The headwaters of the Klickitat receive moderate precipitation, much in the form of snow, while the rest of the river borders the semi-arid zone of eastern Washington. The lower portion of the river receives 15 to 20 inches of precipitation annually, compared to over 60 in the upper reaches. Only two to six inches of this falls during the summer. The climate is classified as temperate, with summer temperatures approaching 90 degrees and winter temperatures often below freezing. This contrasts starkly with areas to the immediate west, which receive over 80 inches of precipitation and have much less fluctuation in temperature.

The Klickitat's major tributary, Big Muddy Creek, flows from the snow-covered flanks of Mt. Adams, at 12,307' the second highest volcano in the Cascades. River flow, directly related to climatic conditions, varies considerably. In the spring the river is a torrent, while flows drop dramatically with the coming of summer. Fall and winter precipitation bring the river up somewhat but not nearly to the level of spring runoff. Even with this fluctuation, snow melt from the headwaters, augmented by springs, keeps the river at a level that makes boating and fishing possible year-round.

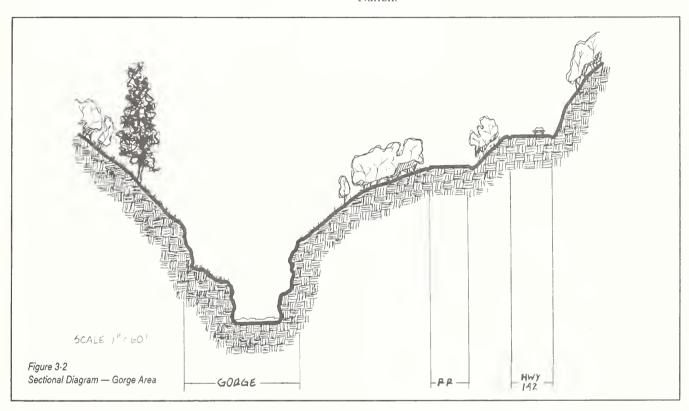
At the upper end of the designated segment near Wheeler Canyon and the small community of Pitt, the river flows through a broad canyon. The side slopes are a patchwork of oak groves, bunchgrass fields, and rock cliffs, dotted with stands of ponderosa pine. As the river drops toward the Columbia at a steady gradient of about 26 feet per mile, the canyon tightens and small rapids spike the channel. Highway 142 winds closely along the river's east bank, sometimes adjacent the river and sometimes up to 100 yards away, with riparian vegetation obscuring many views of the river. The railroad tracks parallel the river on the west bank. Occasional cleared fields and small clusters of residences are scattered along the roadside. (see figure 3-1)



At about RM 2.5, the Klickitat drops into a tight, rock-walled gorge (see figure 3-2). The water cascades and crashes through the rocky channel where Native Americans continue to use the dip netting process employed for generations to catch salmon and steelhead. The fish ladder and a parking area are on the west bank just where the water pools above the first falls in the gorge. In the next mile, dip-net fishing platforms are suspended from the gorge walls. Several informal pullouts provide the opportunity to view this remarkable gorge, which also can be seen from a bridge providing access to the west bank in the Fisher Hill area near the bottom of the gorge. At about RM 1 the river slows down, though still confined between steep canyon walls, and flows gently for a brief section before entering the Columbia.

culture of central Washington and Oregon. These groups established elaborate cultures known for intricate basketry and advanced fishing techniques, as well as highly evolved religious and social structures. The river itself was named for the people who lived at its mouth near the present town of Lyle. This village represented the western edge of the territory utilized by the Klickitat people.

While Native Americans were largely displaced by European settlers and the gradual decline of the fisheries, people of both Wishram and Klickitat ancestry continue to make use of the river for subsistence and for social and religious purposes. Today the Klickitat and Wishram Indian bands are affiliated with the Confederated Tribes and Bands of the Yakima Indian Nation



3.2 History

Archaeologic evidence suggests that people have inhabited the Columbia River and plateau for over 10,000 years. The Klickitat River area offered a host of advantages, including favorable climate, abundant food sources such as salmon and big game, and trading opportunities resulting from the Columbia. Early inhabitants, like those of later times, tended to concentrate their use in areas with suitable terrain and access. The river's confluence with the Columbia River was one such place, offering mild slopes, protection from the elements, and ready access to hunting and fishing sites.

In historic times, two Native American groups inhabited the Klickitat River area: the Wishram, who typically settled near the Columbia River; and the Klickitat, whose territory covered much of the drainage. Both belonged to the larger plateau

The Lewis and Clark expedition was the first official European exploration of the Klickitat area. The Klickitat is mentioned in the expedition journals (referred to as the "Caterack River"), but the expedition did not travel far upstream.

European settlement of the area commenced with the opening of the Oregon Trail and intensified with the coming of the railroad and improved river transportation. The influx of non-Indian settlers also was heavily influenced by the Donation Land Act of 1850, which allowed citizens to obtain 320 acres of land from the public domain. Most of the settlers chose to settle to the west in White Salmon and Hood River, where timber was readily accessible and lands better suited to agriculture. Early land use activities in the lower Klickitat

^{5.} In this document, "the gorge" refers to this section of the Klickitat, not to the Columbia River Gorge.

River corridor included agriculture, ranching, river transportation and logging. Ranches were established along the river, especially in areas close to the Columbia. Woodburning, sternwheel boats transporting people and goods to settlements along the Columbia reached their peak in the 1850's and 1860's.

The town of Lyle was so named because it was founded on land purchased by J.O. Lyle in 1878. Perhaps the first land speculator in the area, Mr. Lyle platted the town. Small businesses were started to serve the river trade. The major impetus for the continued growth of Lyle was the construction of the Columbia River and Northern Railroad in 1902, which terminated at the town. Lyle became the most important port in Klickitat County.

In the early 20th Century, more extensive use of the area for timber harvest, ranching, and recreation was made possible with the development of public roadways and railroads linking Lyle, Goldendale, and Glenwood. Yet even with this increased access, the steep slopes along the river prevented all but the most modest of developments. As a result, the river corridor today retains many of the natural qualities viewed by early Native Americans, trappers, and settlers.

3.3 Land Ownership Patterns

Of the approximately 4,800 acres within the designated boundaries, 67 percent is owned by private individuals (see Map 3-1). About 100 parcels are privately owned, ranging in size from an acre to more than 200 acres. State agencies manage 1,100 acres, or 28 percent of the total acreage, and federal agencies about 500 acres. Of the state lands, the Washington Department of Natural Resources (DNR) manages 200 acres as public trust lands and the Washington Department of Fisheries (WDF) owns most of the land along the gorge. An additional five percent, mostly along the gorge, consists of Native American trust lands. The remaining lands in the corridor are three small parcels owned by Klickitat County or the North Dalles Irrigation District.

Based on findings of navigability, the federal government owns the bed and banks (to the ordinary high water line) of the Klickitat from its mouth to the top of the Bonneville pool, about a mile upriver from the Columbia (Winther, 1990). Washington State owns the bed and banks (to the median highwater line) from this point upriver to the Leidl Bridge area, well above the designated segment (Thomas, 1990).

3.4 Land Uses

Two thirds of the river corridor is forested (*see Map 3-2*). The remainder is mostly rangeland, occupying one quarter of the land, and hayfield/pasture, rockland, and residential housing, each occupying about three percent of the corridor. Residences occur in small clusters in a half dozen locations along the river bottom where development has been feasible.

Timber Harvest. Forested areas consist of Oregon white oak/bunchgrass stands with occasional pockets of ponderosa pine. Of the 3,200 acres of woodland, about 700 are on land owned by the Washington Department of Fisheries or the Washington Department of Wildlife and would likely not be available for timber harvest. The other 2,500 acres are located on private, Indian or DNR lands and could potentially be harvested. The vast majority of this acreage is located on rugged terrain and consists of tree species of low economic value (oak) and small diameter.

Based on slope, timber, and land ownership, four areas totalling about 200 acres contain timber that could be considered commercially attractive (using an estimate of 20 mbf/acre, about 4 mmbf could be harvested). Three stands of mature ponderosa pine, located on gentle slopes next to the river at RM 4.2, RM 6.5, and RM 8, contain ponderosa pine and some oak that could be logged from the railroad or by helicopter. The fourth is an upslope area at RM 10.6 that has seen recent harvest activity—a small clearcut logged via roads on steep side slopes. This area presents the only obvious evidence of commercial timber harvest activity in the corridor. Other areas dispersed throughout the corridor have mature stands of oak that could be harvested for firewood.

cows on both sides of the river. Much of the use is in the spring only, on land owned or leased by ranchers. Assuming that cows access the river corridor about four months per year, this would mean about 1,800 animal unit months (AUM) of use. Some of the rangeland is fenced to keep cows away from the state highway, railroad tracks and river during spring flood. Side creeks provide the main source of livestock water (Kreft, 1990). Grazing use levels were higher twenty years ago, but dropped considerably due to changing agricultural economics and some loss of rangeland due to subdivision of lands within the corridor (Kreft, 1990).

Residential Use. There are about 55 houses within the corridor. Existing residential development is limited to a few locations, mostly in four clusters of structures built on mildly sloping benches above the 100-year floodplain (although a few structures exist within the floodplain). The community of Pitt is the largest of these clusters, with 11 houses. The east corridor boundary skirts the west side of the town of Lyle near the mouth of the Klickitat.

Regional demand for housing is increasing due in part to the boom-town atmosphere spurred by windsurfing in the greater Hood River area. In addition, regulations on residential construction in some portions of the CRGNSA may increase housing pressure in lands outside the CRGNSA boundaries. Gross housing sales volume in the Hood River/White Salmon vicinity increased from \$15 million in 1986 to \$45 million in 1989 (Darby, 1990). View properties on both sides of the

^{6.} An animal unit month (AUM) consists of 1 cow or 5 sheep using an area for one month.



One of many gently rolling benches along the river; State Highway 142 parallels the east bank along this section (view north from about RM 2.5).

Columbia near Hood River have at least doubled in value in the last two and a half years (Darby, 1990). The Klickitat County Assessor estimated that 1989 assessed valuations in one area of the White Salmon River increased an average of 30% on improvements and 75% on land since 1985, with property along the river increasing the most (Shipp, 1989).

This phenomenon has begun to extend as far eastward as the Klickitat River valley. Some land and improvements in Lyle, at the mouth of the Klickitat, have increased approximately 30% in value over the last four years, with selected view lots perhaps doubling in value (Shipp, 1989). A number of houses in the town of Klickitat, (located at RM 13.5, three miles upstream of the lower Klickitat segment), were purchased recently by an out-of-county investor (Shipp, 1989). However, residential development in the river corridor will continue to be constrained by the limited supply of suitable building sites due to steep topography, areas prone to flooding, and poor road access to the west side of the river.

River Access and Cultural Sites. The corridor contains two undeveloped county park/river access sites and a Washington Department of Wildlife access site. Undeveloped access sites on public and private lands occur along Highway 142 at several locations (see Section 3.7 for a detailed description of recreational sites and uses in the corridor). The gorge area contains a fish ladder at RM 2.5 and scaffolding for dip-net fishing in several locations.

Transportation Routes. State Highway 142 and Burlington Northern railroad tracks parallel the river for the segment's length. Both are situated on the east rim high above the river from the mouth to the Fisher Hill bridge at RM 1.8, where an improved road bridges the gorge, as does the Burlington Northern rail line. From this point on, the road and

railroad bracket the river in close proximity for the length of the segment. The highway bridges the river at RM 10.3 to join the railroad on the west side of the river for the upper 1/2 mile of the segment.

Four unimproved (dirt) roads and several short improved (paved or graveled) roads are within the corridor. Bridges include two at the mouth (one for highway 14, one for the Burlington Northern mainline), the two at Fisher Hill (one for road and one for rail), one at Pitt, and a privately owned footbridge at RM 7.0. Another private footbridge crosses the river at about RM 1.6, where a network of trails provides access to both banks from either the Fisher Hill bridge area or a gravel parking area on a shoulder of Highway 142 near RM 1.1.

3.5 Land Use Controls and Regulations

Many county, state and federal laws and programs affect land uses within the river corridor. These are the existing tools available to governments to meet desired social objectives, including resource conservation. The principal mechanisms



The road and railroad parallel the river on the east bank for the lower 1.5 miles of the segment (view north, about RM 1).

include county zoning, the Columbia River Gorge National Scenic Area management plan, the Shorelines Master Plan, floodplain regulations, building and health codes, the state Forest Practices Act, state Hydraulic Code, and current tax use laws.

Zoning. The County has zoned most of the lower Klickitat River corridor as Open Space (*see Map 3-3*). The purpose of this zoning district is to provide for permanent open space and to limit development in areas where the costs of providing county services would be excessive. Uses allowed outright include single family dwellings (with a 20-acre minimum lot size), agriculture, timber harvest, conservation preserves, recreational developments, and planned unit developments (upon approval).

Much of the upper mile of the segment is zoned Rural Residential. Its purpose is to maintain openness and the rural character of the countryside, to protect the county's water and other natural resources, and to provide areas which are appropriate for typical rural development of all kinds. Uses allowed outright include single family homes (with a 2-acre minimum lot size), agriculture, timber harvest, planned unit developments and home occupations.

The area surrounding but not including the community of Lyle is zoned General Rural. Regulations for lands in this district are similar to those of the Rural Residential district, except that single family homes must have a 5-acre minimum lot size.

The unincorporated town of Lyle within the river corridor is zoned Residential. The purpose of this district is to provide areas of higher density residential development where community water and sewer systems are available. Uses allowed outright include single family housing, duplexes, mobile homes (provided certain criteria are met), mobile home parks and home occupations. Because Lyle has a community sewer system, the minimum lot size is 6,000 square feet.

The county has procedures for making exceptions to zoning regulations, in the form of conditional uses or variances, and for changing them through rezoning. Conditional uses are activities not specifically permitted outright within a zoning district but which may be granted a land use permit. Barring strong local objections, conditional uses usually are granted (Kunz, 1990). Variances to the zoning ordinance may be granted for hardship caused by the physical qualities of a piece of property. Unlike conditional uses and variances, zone changes (rezones) are changes to the law which must be acted upon by the county legislative authority (the Board of County Commissioners).

Columbia River Gorge National Scenic

Area. The lower 1.5 miles of the Klickitat River, included within the Columbia River Gorge National Scenic Area (CRGNSA), are subject to its provisions (see Box 3-1). The portion of the corridor located within the CRGNSA is a

General Management Area except for the lower 1/4 mile of river at town of Lyle, which is designated an Urban Area.

The CRGNSA is in the process of developing land use plans for the Scenic Area. Counties are bound by the CRGNSA legislation to adopt ordinances in conformance with the CRGNSA plans. With the exception of the Urban Area at Lyle, existing county zoning within the CRGNSA is likely to change.

General Management Areas are divided into numerous zoning districts. Almost all of the Klickitat Wild and Scenic River corridor within the CRGNSA boundary is proposed for open space zoning, which differs from the county's definition and management of open space. This zone would allow no new residential or commercial development and would greatly restrict other uses, but forest practices would not be regulated. As with standard zoning, variances may be granted to individual landowners in hardship cases.

Three other zones, all about four to seven acres each, are proposed for the portion of the CRGNSA that lies within the river corridor boundaries: a medium-density recreation zone at the county park; a residential zone adjacent the urban area; and an area just north of the residential zone which will be designated either commercial recreation or residential. The medium-density recreation zone would allow parking for up to 50 cars and would allow some recreation facilities. The residential zone was proposed to acknowledge existing development outside of the Urban Area. The commercial recreation zone was initially proposed in response to a request for developing a campground to accommodate tents and RVs. However, this development currently is not scheduled to take place and the Commission is considering zoning the area for residential use (Litt, 1990).

Under proposed CRGNSA regulations, all new development within the Gorge boundaries visible from key viewing areas would have to be visually subordinate to its landscape setting. Development not visible from these areas would have to be compatible with its landscape setting. Much of the lower Klickitat corridor within the CRGNSA (especially the west slope) is visible from the Rowena plateau, a key viewing area.

Shorelines Master Plan. In accordance with the Washington State Shoreline Management Act of 1971 (RCW 90.58), Klickitat County developed a Shoreline Master Plan (SMP) "to protect shoreline areas against poor management and destructive usage." The Shorelines Master Plan creates a zoning overlay for the non-federal land area along streams whose mean annual flow exceeds 20 cfs. The overlay extends laterally 200 horizontal feet from the waterway, and may also include contiguous wetlands. Shorelines areas are divided into environmental zones (called "environments" in the Act), which specify land uses that are allowable, conditional or prohibited. When regulations of shoreline zoning conflict with those of the underlying zoning, the more restrictive applies.

Box 3-1

Columbia River Gorge National Scenic Area.

On November 17, 1986, President Reagan signed into law an act creating the 253,500-acre CRGNSA, extending on both sides of the Columbia River between the mouth of the Deschutes and Troutdale, OR. The CRGNSA was established for two purposes: "1) to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia River Gorge; and 2) to protect and support the economy of the Columbia River Gorge area by encouraging growth to occur in existing Urban Areas and by allowing future economic development in a manner consistent with the first purpose" (Section 3, Public Law 99-663).

The Act called for a new partnership among the Forest Service, the States of Washington and Oregon, and local counties. It also created a citizens' bi-state commission, known as the Gorge Commission, to coordinate land uses and management plan development.

The act created three types of management areas within the gorge: Urban Areas, General Management Areas, and Special Management Areas. The Commission has the responsibility to oversee the 144,700 acres of General Management Areas, in which most existing uses and activities are allowed except for new industrial development. The Forest Service is responsible for the 112,300 acres of Special Management Areas, which are environmentally or visually sensitive lands on which uses and activities are more restricted. The 28,000 acres of Urban Areas, exempt from Gorge Act land use controls, are the focus of most economic development activities.

Final interim guidelines for the management of CRGNSA lands have been adopted and approved (CRGNSA June, 1987). These guidelines will remain in effect until the final Management Plan is developed and approved, scheduled for Fall, 1991.

On July 9, 1990 the county Board of Commissioners enacted Ordinance #070990-1 which adopts the 1990 Klickitat county Shoreline Master Plan Update, ratifying Resolution No. 05090 and the Department of Ecology's July 5, 1990 approval of this plan. The county will conduct a review of the plan every two years and update it as needed.

Under the revised SMP, most of the lower Klickitat shoreline falls in the Conservancy Environment, which is characterized by very low intensity land uses primarily related to natural resource use, relatively low land values, minor capital investment and relatively major biophysical limitations. Its objective is to balance sustained yield natural resource utilization with low density recreational uses.

Within a Conservancy Environment, residential development is allowed, but must be set back 100 feet from the river, and only one residence is allowed per 660 feet of river (this frontage requirement applies only to new land divisions). Agriculture is limited to practices such as non-intensive grazing and commercial development is prohibited. Timber harvest is limited to 30 percent of the merchantable stems every 10 years.

The east bank of the lower 1/2 mile of the river, near the town of Lyle, is designated a Community environment. This environment is characterized by moderate to high intensity land use, including residential, commercial and industrial development. Most land uses are allowed, with restrictions. As described above, this environment may change as a response to CRGNSA land use plans.

Under the revision, a natural buffer zone is superimposed on all environments. It consists of a 50-foot strip (measured horizontally) from the ordinary highwater mark of each riverbank. Its purpose is to preserve the structure, function and aesthetic qualities of the natural riparian ecosystem. Most land uses are prohibited. Non-intensive grazing, some signs, and recreational trails are allowed (with a conditional use permit). Also allowed within the buffer is one harvest of 30 percent of merchantable stems within the next ten years, after which further timber harvest is prohibited.

The county planner serves as the shorelines administrator, but no county employee is assigned the regular duty of monitoring compliance with shorelines provisions. During the past two years in Klickitat County, 12 violations have occurred and been acted on by the county, all resulting from complaints by neighbors, Forest Service employees, or recreation visitors (Kunz, 1990).

Floodplain Management Ordinance. The county restricts development within a defined floodway (the area which commonly receives floodwaters) and the 100-year floodplain to minimize public and private losses due to floods. The ordinance requires that the lowest level of new residential construction must be above the base flood (100-year) level, and that new non-residential construction be flood-proofed below the base flood level. It also prohibits new residential construction in the floodway. Some of the lower Klickitat River valley bottom lies within the 100-year floodplain as defined on Federal Emergency Management Agency (FEMA) maps. The location of the 100-year flood plain is not precisely known because there has been no comprehensive flood

analysis. The county currently is undergoing a comprehensive flood plain study which should be completed by June, 1991.

Building Code. The county requires landowners to obtain building permits to erect permanent structures in the county, and placement permits for trailers occupied more than 60 days a year. These permits require approval from several county departments including Planning, Public Works, and Health, providing a mechanism for monitoring compliance with the zoning planned use ordinances. Farm buildings can be erected with an agricultural permit rather than a standard building permit if the structure is built solely by the owner and is at least 100' from property lines. Structures built under an agricultural permit do not have to meet the Uniform Building Code, which sets minimum construction standards and generally precludes trailers (Grimes, 1989).

The building department does not issue permits for construction on slopes considered too steep (usually about 50 percent, depending on soils) without engineering data assuring adequate erosion abatement and slope stabilization. A permit to build a structure on steep slopes may be granted if terracing, retaining walls, pilings, or other methods are incorporated into the building design (Grimes, 1989). Areas with steep slopes are shown in Map 3-4.

County Health Code. The county regulates location of septic systems to control the quality of ground and surface waters. A septic permit is required and septic tanks must be 50' from a watercourse with drainfields set back 100'. Generally, drainfields are not permitted in areas with soils that are either too slowly permeable or excessively permeable, where the water table is within 5 feet of the surface, where slopes are greater than 15 percent, or where surface water drains over the site. Septic systems are allowed within the 100-year floodplain if floodwater infiltration into the system and sewage escapement into floodwaters is minimized.

Forest Practices Act. Administered by the Department of Natural Resources (DNR), the Washington State Forest Practices Act applies to non-federal lands. The law regulates timber harvesting and associated practices to allow timber production while providing fish and wildlife habitat. Particular attention is paid to lands adjacent rivers (riparian management zones), in which a certain number of snags and live conifers and hardwoods must be left for riparian functioning. These buffer requirements must be applied in conjunction with the Shorelines Management Act buffer requirements. In the past there have been several violations of conversion requirements. Most resulted from applicants' failure to indicate on the application whether or not the activity was a conversion.

Unless the area is to be converted to other uses, site preparation is required following a regeneration harvest, as is reforestation if the harvest exceeds a partial cut of 50% within 5 years. In shoreline areas logging is restricted to 30% of the stand every

ten years; natural regeneration is expected to be sufficient in these areas.

The Act defines four classes of forest practices. Most timber harvest activities on the lower Klickitat would be Class III practices, which require a Forest Practices Permit but no State Environmental Policy Act (SEPA) review.

In 1986, the Forest Practices rules and regulations were amended to include provisions in the newly developed Timber Fish and Wildlife Agreement (T/F/W). Resulting from intensive meetings between state agencies, Indian tribes, environmental and timber interests, the T/F/W Agreement made recommendations for improving management of forest resources for timber, fish, wildlife, water quality and quantity, and cultural values. Statutes, regulations and management procedures were amended to implement these recommendations.

The Forest Practices Act calls for coordination with other laws and programs, particularly the hydraulic project review process and the Shorelines Management Act. The DNR has agreed to route Forest Practice Permit applications for lands within shorelines through the county prior to issuance of permits (Havercroft, 1990).



Highway provides open view of the river for much of the segment. Gabion protecting roadway is visible at lower right (view upstream from Highway 142 near RM 5).

State Hydraulic Code. Administered by the Washington Department of Wildlife (WDW), a hydraulics project approval (HPA) is required for any work that will "use, divert, obstruct or change the natural flow or bed" of all state waters. The code applies to all work to be performed below the ordinary high water line. To date, few HPAs have been applied for on the Klickitat River (Zimmerman, 1989).

While the code applies to most any type of activity that may take place within the wetted perimeter of waterways, protection of fish life is the only ground upon which approval can be conditioned or denied. The WDW strongly encourages non-structural solutions to bank protection problems, such as willow waddling, log emplacement, and upstream pool construction to slow flows. It also considers the cumulative impacts of successive HPA permits, particularly regarding stream channelization (Zimmerman, 1989).

Forest Practices permits and Shorelines Substantial Development permits are routed through the WDW when activities are proposed within the wetted perimeter of streams. The WDW does not routinely notify the County Planning Department about HPAs, although the county, under the SMP, could require mitigation for impacts other than those to fish life.

Instances of failure to obtain a hydraulics permit are rare but do occur. Historically funding has been inadequate to conduct monitoring and enforcement operations. Concern also has been expressed over inconsistent penalties for violations.

State Water Quality Standards. The state of Washington, as guided by the Water Pollution Control Act and the Water Resources Act of 1971, has a policy that no surface water degradation be allowed on National Wild and Scenic rivers. This policy could have effects on existing and potential land use activities.

Herbicide and pesticide application in the river corridor is regulated by both the federal and state governments. The U.S. Environmental Protection Agency licenses and regulates use of these agents under authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). State licensing, regulation, and complaints are the responsibility of the Washington Department of Agriculture as authorized by Revised Code of Washington RCW15.58 and 17.21 and Washington Administrative Code WAC 16-228-161, -164, and -166. The Washington Department of Transportation (DOT) controls vegetation within its rights-of-way by applying herbicides and by physically removing vegetation. In the spring and fall, herbicides are sprayed onto the road shoulder and into the ditch across the highway from the river. DOT applications are monitored by the Washington Department of Ecology and the federal Department of Environmental Quality.

The DOT cuts vegetation within the right-of-way to maintain a safe line-of-sight for highway traffic. Vegetation usually is not removed entirely. Alder and maple that seed into gabions are removed to prolong the life of the gabions.

Current Use Assessment. Although not county land use controls per se, two state laws have a significant effect on land use in the county. The Timber Tax Act of 1971 (RCW 84.33) addresses large commercial forest land holdings and the Open Space Tax Act (RCW 84.34) addresses smaller timbered parcels, agricultural lands and open space. The laws are designed to preserve agricultural land, forestland, and open space in the state by offering preferred property tax rates to owners of qualifying lands. Some of the private commercial timber land and agricultural land along the lower Klickitat is enrolled in one of the current use tax programs.

Current use values for agricultural and forest lands are developed by factoring in crop values, production costs, loan rates and property tax rates. Potential uses of lands are not considered when establishing their current use tax rate, nor are values of neighboring properties not in the current use tax program. Open space valuation is not well developed in the county. The only existing guideline is that it cannot be less than the value of the land if it were used for agriculture. A public benefit rating system would help guide the county assessor; such rating systems are being used by other counties in Washington but not presently in Klickitat County (Shipp, 1989). There are property tax penalties for removing lands from either program, except in special instances such as transferring land to a governmental entity.



View of Pitt from Highway 142 bridge near RM 10.

3.6 Socioeconomics

Population. Klickitat County is rural; of an estimated 1988 population of 16,600 people, 61 percent live in unincorporated areas. Population growth has slowed significantly since the 1970-80 growth rate of 30.4 percent (3 percent annually), to only 4.9 percent for 1980-88 (0.6 percent annually). One component of population change for 1980 to 1988 is a net out-migration of about 200 people. In comparison, the Washington population level increased 10.5 percent (1.3 percent annually) for the 1980 to 1988 period.

The county is expected to experience negligible growth through the end of the century. Population forecasts show that the county is estimated to have a population of 16,781 for 1990; 16,935 for 1995; and 17,084 for 2000 (Washington Office of Financial Management 1989). However, the portions

of the county along rivers, including the Klickitat and Columbia, would be expected to have much higher rates of population increase.

The population of Lyle, an unincorporated town located at the mouth of the Klickitat, is about 900. About 800 people live in the unincorporated town of Klickitat, located about eight miles below the Little Klickitat River, and about 600 people live in Glenwood, the other unincorporated town closest to the study corridor.

There are three incorporated cities in the county. Goldendale, the county seat and largest city in the county, had an estimated 1988 population of 3,730. Bingen and White Salmon are closer to the White Salmon River than to the Klickitat. Bingen has had a stable population for the past 18 years with a population ranging from 665 to 679 people. However, White Salmon has

TABLE 3-1

AVERAGE ANNUAL EMPLOYMENT

(1 6 YEARS OLD AND OLDER), BY INDUSTRIAL SECTOR

Industrial Sector	Number/(Percent) ¹				
	1980		1	1988	
Agriculture	534	(9.4)	1,100	(16.5)	
Forestry and Fishing	• 146	(2.6)			
Mining	28	(0.5)	_2/		
Construction	494	(8.7)	120 ² /	(1.8)	
Manufacturing	1,241	(21.8)	1,550	(23.3)	
Transportation, Communications and Public Utilities	457	(8.0)	250	(3.8)	
Wholesale Trade	162	(2.8)	640³/	(9.6)	
Retail Trade	750	(13.2)	3/		
Finance, Insurance, and Real Estate	151	(2.6)	100	(1.5)	
Services	426	(7.5)	490	(7.4)	
Government	1,311	(23.0)	1,290	(19.4)	
TOTAL LABOR FORCE TOTAL EMPLOYED TOTAL UNEMPLOYED	6,890 5,700 1,190	(82.7) (17.3)	7,630 6,650 980	(87.2) (12.8)	

I/Blanks indicate data were not available.

Sources: U.S. Bureau of the Census (1982b); Cole (1989)

^{2/}Employment in the construction and mining sectors were combined.

^{3/}Employment in the wholesale and retail trade sectors were combined.

had an annual growth rate of 1.7 percent for both the 1970-80 and 1980-88 periods (Washington Office of Financial Management 1982, 1989). Demographic data show that Klickitat County had a slightly older population and larger households than the State in 1980 (U.S. Bureau of the Census 1982a). The County had a median age of 30.3 years and average of 2.73 people/household, compared to 29.8 years and 2.61 people/household for Washington. The County had a larger proportion of Native Americans than the State (2.95) percent versus 1.54 percent).

Economy. Klickitat County has historically had one of the highest unemployment rates in the state, but has followed national and state trends by decreasing its average annual unemployment rate from 17 percent in 1980 to 13 percent in 1988. Three industrial sectors employ a significant proportion of the labor force (see Table 3-1); manufacturing accounted for 23 percent of employment in Klickitat County, followed by 19.4 percent in government and 16.5 percent in agriculture (Cole 1989). Only the proportion of people employed in the agricultural and manufacturing sectors increased from 1980 to 1988. People living in the Klickitat River area typically work in agriculture or timber, or commute to jobs in the Dalles or Hood River. A Champion International mill is located upstream from the designated segment and provides employment for local residents. Champion closed the mill for several months in 1990 but recently reopened it on a limited basis.

Income levels for Klickitat County and Goldendale have continually been less than those for Washington state. Klickitat County had a 1987 estimated median household income of \$21,400 and a 1986 per capita income of \$12,893, compared to \$27,600 and \$15,009, respectively, for the State of Washington. These figures represent a 22 percent lower median household and 14 percent lower per capita income for the County.

Klickitat County had a total of \$24.1 million in general county expenditures in 1981-82 (U.S. Bureau of the Census 1988), including 45.1 percent for education, 13.3 percent for health and hospitals, 11.8 percent for highways, 3.8 percent for police protection, and 26 percent for other expenses. The County had an outstanding debt of \$16.5 million or \$1,004 per capita in 1981-82.

The county bookkeeping system did not provide a convenient means for obtaining current fiscal revenue and expenditure information. In general, the County was characterized as having to carefully budget and evaluate its resources each year because of the limited economic base and revenues collected (Klickitat County Assessor's Office 1989).

The median value of 6,498 housing units in the County in 1980 was \$39,500. This was far less than the State median house value of \$60,700. In 1982, the average value of the 575 farms was \$587,100 and land was valued at an average \$482 per acre (U.S. Bureau of the Census 1988). Several property levy tax rates apply to lands in the study areas. Property tax levy rates generally are between \$14 and \$17 per \$1,000 of assessed property value (Kłickitat County Assessor's Office 1989).

Other Uses. The United States Department of Defense has an established Military Training Route (MTR) that passes over the upper Klickitat River. The route, used to train aircrews for the U.S. Air Force, was selected to avoid populated areas and air hazards. Use of the MTR is governed by procedures developed jointly by the Department of Defense and the Federal Aviation Agency. The minimum flying altitude for this MTR is 6,000 feet above mean sea level, or approximately 4,000 feet above the rim of the Klickitat Canyon and 5,500 feet above the surface of the water. Over the past year there have been an average of six sorties (flights) per month.

3.7 Recreation Opportunities and Public Access

The lower Klickitat offers a spectrum of recreation, ranging from semi-primitive non-motorized to rural opportunities (see Box 3-2). Boating, fishing, hunting, nature study, camping, picnicking, sightseeing and other activities are popular in the scenic and accessible river canyon (U.S.D.A. Forest Service, 1989). Recreational use occurs throughout the year with fishing, hunting and day use (sightseeing, picnicking etc.) primary activities in the spring, summer and fall. Commercial use of the river currently is very low, consisting of a few fishing guides. The heaviest recreational use along the river is bank and boat fishing for anadromous as well as resident



Pooled water extends nearly one mile upstream, providing excellent opportunities for motorboating in the scenic river canyon (view north from Highway 14 bridge).

Box 3-2

Recreation Opportunity Spectrum

The Forest Service and other agencies use the Recreation Opportunity Spectrum (ROS) framework to characterize outdoor recreation settings (places people go for recreation) based on such characteristics as access, naturalness, likelihood of encounters with other visitors, level and type of facilities and management regulations, and evidence of past recreational use. The ROS contains a range of opportunity classes: primitive, semi-primitive non-motorized; semi-primitive motorized; roaded natural; roaded modified; rural; and urban. Following are descriptions of the classes referred to in the text.

Semi-Primitive Nonmotorized. Some opportunities for isolation from the sights and sounds of people in a predominantly unmodified natural environment of moderate size. Concentration of users is low but there is often evidence of use. Spacing of groups may be formalized to disperse use and limit contact. Area management occasionally uses onsite controls (such as signs or self-registration boxes) but they are subtle and limited. Facilities are provided for the protection of the resource and for the safety of users only. Activities are nonmotorized and similar to those present under the primitive category, but use levels may be higher.

Semi-Primitive Motorized. Opportunities for isolation from the sights and sounds of people may not be generally available. The area is predominantly unmodified natural environment but with motorized

access. Concentration of users is low to moderate with occasional to regular contact with other groups. Area management may utilize on-site controls and restrictions. Resource modification may be evident but should harmonize with the environment, and rustic facilities and developments may be provided for resource protection and user safety as well as for user convenience. While activities listed under the previous classes are possible, so are mechanized and motorized activities such as offroad vehicle use, motorboating, and auto touring.

Roaded Natural. Opportunites for solitude and for affiliation with other users are about equal, in a generally natural environment with moderate evidence of the sights and sounds of people. Concentration of users is low to moderate with facilities sometimes provided for group activity. Rustic facilities may be provided for user convenience, as well as for safety and resource protection. Practice of outdoor skills may be important.

Rural. Opportunities to experience affiliation with individuals and groups are prevalent in a substantially modified natural environment. Sights and sounds of people are readily evident and concentration of users is often moderate to high. On-site controls and direct management techniques predominate, and resource modification and utilization practices are obvious. Access and facilities are designed for high levels of use and are developed for the convenience of users. Facilities for intensive motorized use are available. All activities listed previously are possible, as well as spectator sports, outdoor concerts, recreational vehicle camps, and modern resorts.

fish. The Klickitat and Deschutes are the only rivers in the region which are runnable year-round in open drift boats and offer exceptional opportunities for fishing.

Fishing for steelhead and spring chinook salmon, is especially popular along the lower two miles of river (Wright, 1989; Ramsey et al., 1989). The river is considered one of the better rivers in Washington for fishing for steelhead; the WDW 1986 steelhead catch estimate ranked the Klickitat in the top 20 streams of the state. It is also one of the few rivers in the state with natural runs of spring chinook (Wright, 1989). Fishing for resident fish such as rainbow trout primarily occurs above the gorge from RM 3 to RM 11 and above (Weinheimer, 1989).

Bank fishing is the primary use because access for drift boats is limited and difficult. Motorized boating occurs near the river's mouth where the waters of the Bonneville pool back the river up about one mile. Anglers can launch boats at Columbia River boat ramps near Lyle and motor up the Klickitat. Upstream from this point, swifter currents and rocky

stretches pose a barrier to outboard motor use. Little motorized use occurs above the gorge section, although motorized craft have been used during the spring chinook season.

The river also is used by boaters who are not fishing; the relatively calm Class I-III water (see Box 3-3) provides excellent opportunities for canoeing and drift boating upstream from the gorge section. There are reports of people running the gorge itself, but this probably has been done only a handful of times. The gorge section would be rated Class IV to V and contains drops that could rate higher, especially during high flows. Any boating use has great potential to conflict with Native American dip-net fishing.

Many opportunities exist in the corridor for sightseeing, photography, and other activities focusing on the relatively undeveloped landscape. Highway 142 is promoted as part of a scenic drive loop for Klickitat County, drawing visitors from the Columbia Gorge area. It is one of two places in the region where native fishermen can be observed using traditional dip net fishing methods, although there is not an overlook area

Whitewater Rating System

Class I is easily run whitewater consisting of moving water with riffles and small waves. Passages are clear with few or no obstructions, and little maneuvering is required.

Class II consists of rapids of moderate difficulty with waves up to three feet. The river channel has wide, clear passages and occasional obstructions requiring some maneuvering. Scouting usually is not required.

Class III is difficult whitewater containing numerous high and irregular waves. Channel with narrow passages and numerous obstructions (rocks and eddies), may require complex maneuvering. Scouting is usually needed.

consisting of long, continuous rapids with powerful and irregular waves. The river channel is obstructed with dangerous rocks and boiling eddies and passages are constricted, requiring powerful and precise maneuvering. Scouting is mandatory.

Class V rapids are extremely difficult whitewater, consisting of very long and violent rapids following each other almost without interruption. The channel is highly obstructed with big drops, rocks, and large, chaotic waves, requiring very precise maneuvering. Scouting and close study is essential but often difficult, and the consequences of an unsuccessful run may be severe.

Class VI whitewater, considered unrunnable by most standards, is extraordinarily difficult rapids or falls—Class V water carried to extremes of navigability that would involve substantial hazard to life.

designed for this purpose or any attempt to let people know more about dip-net fishing. The lower mile of the river provides local residents and area visitors with calmer water suitable for motorboating, deep pools for swimming, and good bank access for salmon and steelhead fishing.

Access and Facilities. Several sites are used for public access and recreation (*see Table 3-2*); two of these sites are on private land and use currently is allowed by the landowners. Highway 142, which parallels the river throughout the segment, provides river access along much of the segment. People pull off the road at one of the many places where the gravel shoulder is wide enough, and walk down the bank to the water's edge.

A highway pulloff at RM 1.1, about 1/2 mile downstream from the Fisher Hill bridge, provides access to the river via a well-used trail that cuts across the railroad tracks and switchbacks down to the water's edge. The water is calm, but the river still flows through a rocky gorge where visitors can scramble along a wide, rocky bench next to deep, green pools of water. A primitive wood footbridge provides access to the opposite shore, where trails lead up and downstream. The area is used by salmon and steelhead anglers, sightseers who know about the unmarked trailhead, and other people who just want to be by the river. This area is downstream from the Native American dip-net fishing sites. No facilities are provided, although the state of Washington has a sign next to the railroad tracks to inform people about fishing seasons.

Of the three designated public access sites, two are owned by the county and one by the state. Some of the land adjacent the county park at RM .8 is privately-owned. None of the sites provide drinking water, trash removal service, or regular site maintenance and restoration; all show heavy signs of impact from recreational use. Boat anglers have suggested a need for limited boatramp/river access sites at several locations between RM 3.8 and RM 10 (Ramsey et al., 1989).

Use Patterns. Recreation use data are extremely limited for this river segment. Very rough use estimates range from 5,000 to 10,000 recreation visitor-days (RVD; one RVD equals 12 hours of recreational use) annually (Danylchuk, 1988; U.S. Forest Service, 1989). Traffic counts on Highway 142 at the junction with Highway 14 were estimated at 1,250 vehicles per day in both directions during August, 1989 (Washington Department of Transportation, 1989).

Heaviest fishing use occurs during runs of spring chinook and summer/fall steelhead. Fishing intensity varies with size and duration of runs. Sport catch for steelhead on the Klickitat exceeded 1,400 for 1986, ranking it as one of the more significant sport fisheries in Washington for this species (Washington Department of Wildlife, 1987). Up to 200 anglers have been observed on the lower 1.5 miles of river during periods of heavy use (U.S. Forest Service, 1989).

Although currently low, recreational use of the segment is expected to increase, following trends on other, similar rivers in the region. On the more heavily-used Deschutes, which flows into the Columbia east of the Klickitat, use levels have increased steadily, from just over 90,000 boater-days a year in 1982 to over 130,000 in 1988. Much of this use is by salmon and steelhead anglers, as is the case on the Klickitat. Boating use on the John Day River, which also meets the Columbia east of the Klickitat, has increased about 10-15 percent a year over the past five years, from about 6,500 boater days annually in 1984 to 8,000 - 9,000 in 1989.

TABLE 3-2. RECREATION ACCESSAND USE SITES ON THE LOWER KLICKITAT RIVER

Location and Access	Ownership	Type of Use Description
RM 10.2, east bank, (downstream from Pitt Bridge)	Klickitat County park	Fishing, boating, river access. Unimproved and unmaintained county park land, approx. 2 acres, some parking, no facilities and limited/unimproved river access.
RM 8.1, east bank, next to Hwy 142	Private	Fishing, boating, river access, limited camping. Roadside pullout, approx. 1 acre with unimproved river access (most heavily used as river take-out for drift boats), no maintenance, improvements or facilities.
RM 5.5, east bank, on Hwy 142; know as "Three Pines"	Private	Camping, fishing, picnicking, river access. Unimproved site, approx. 5 acres without facilities or maintenance, some parking and limited river access.
RM 5.1, east bank, maintained gravel road access from Hwy 142; known as Dillacort or "Turkey Hole"	Washington Department of Wildlife	All uses. WDW sportsmens access, approx. 5 acres, with primitive camping and sanitation facilities (IAC funded), river access with limited unimproved boat ramp (take-out area).
RM 1.1, east and west banks; gravel pulloff from Highway 142 on east bank.	Washington Department of Fisheries	Not managed as a recreation site; well-used trail down to the river; no facilities or scheduled maintenance; access is across railroad tracks.
RM 0.8, east bank, primitive road access from Hwy 142; no road signs	Klickitat County & Private	All uses. Klickitat County park lands, approx. 6.8 acres; sportsmens access area, unmaintained; river access without boat launch area (boats launch at Lyle). Land adjacent the park is privately-owned; a cooperative agreement between the landowner and the county to use the privately-owned portion for public access lapsed recently due to lack of county funds.

Use levels changes on these nearby rivers show that demand for recreation on the lower Klickitat is likely to increase well beyond those cited by the Statewide Comprehensive Outdoor Recreation Plan (SCORP), which estimated annual increases of about .8 percent in outdoor recreation use levels through the year 2000. In addition, recreation demand on the lower Klickitat is likely to increase significantly if other rivers in the region instituted use limits. For example, two of the four alternatives being considered for management of the Deschutes River would decrease use from existing levels (Bureau of Land Management, 1990).

Many of the problems common to high-use rivers have not occurred on the lower Klickitat. Although it is not possible without better data to determine a recreational carrying capacity (or, more preferable, to establish the relationship between use patterns and desirable social and physical conditions of the corridor), current use appears to be well below capacity for semi-primitive non-motorized and motorized opportunities.

Safety. A primary concern on the lower Klickitat, the safety of Native Americans engaged in dip-net fishing, is addressed in Section 3.9. Other safety concerns include motorized boating on the river below the gorge and the absence of warning signs above the gorge to alert boaters of hazards in the gorge area (Ramsey et al., 1989). Only one whitewater boating descent of the lower gorge has been

^{7.} These estimates are for floating use between Service Creek and Cottonwood Bridge during the main float season between April and July.



Mixed stands of oak and ponderosa pine are common on the hillsides (view north from WDW access site near RM 5).

documented (Reynier, 1989), but increased numbers of attempts of this risky activity can be anticipated.

Another concern is Highway 142 along the lower three miles of the river. The lack of guard rails and warning signs, twisting road alignment and increased roadside parking have been cited as potential problems at the public meeting in on April 20, 1989, and by Task Force members (Gorman and Frey, 1989). The Washington Department of Transportation does not consider Highway 142 to be dangerous as long as people are not speeding, and the few places that could use guard rails are too narrow for their installation (Hogan, 1990). The county has recommended development of roadside pullouts and view areas along Highway 142 near the gorge at RM 2.5 to resolve some road safety issues (Gorman, 1989). Formal pullouts also would provide an opportunity for interpretive signs.

Impacts of Recreation. At public meetings in Lyle, landowners reported increases in recreation-related trespass, litter, vandalism and theft. The majority of reported situations and problems has been on the river below the gorge, where some of the most concentrated use occurs. Other concerns expressed involve land owner liability and recreation trespass.

3.8 Visual Resources

The scenic resources of the lower Klickitat are influenced by geographical, geological, climatological and cultural associations with the Columbia River Gorge. This reach is more densely settled and utilized than the upper Klickitat primarily due to proximity to major transportation routes along the Columbia. The result is a riverscape composed of cultural as well as natural features and patterns and containing permanent developments such as Highway 142, which parallels much of the river. The historic farm and ranch buildings and primitive canyon switchback roads contribute to the cultural landscape.

Viewshed Analysis. For visual resources, the affected environment is defined as those areas viewable from the river and other important viewing areas such as Highway 14, Highway 142, and developed recreation and access areas (see Map 3-5). Almost the entire river segment is within view of people traveling on Highway 142 and other canyon roads, including the Fisher Hill road. Due to the open vegetation, views from the river extend to the surrounding hilltops or plateaus in most locations. These distant views contribute to the visual variety, landscape scale, and scenic quality. Distant views to Mt. Hood are possible from Highway 142 near RM 2.5. At least 55 residences also have views of the lower Klickitat.

Highway 142 provides the main public access for sightseeing, increasing the scenic value of the river which otherwise would be seen by few. This two-lane highway winds in conformance with the meanders of the river and provides both close views of the river and unfolding panoramas of the canyon. Views are unobstructed by guardrails or other roadside developments. Klickitat County promotes the highway as part of a scenic loop drive.

People who view the river corridor from the river include those who come to fish, boat, or camp. Recreational use on the designated segment of the river is estimated to be 5,000-10,000 RVD's per year. Most of these utilize either the area around the mouth or the area upstream from the gorge. The gorge itself is used mainly by Native American fishermen and those who stop to gaze down at this visually spectacular area. Views from individual residences were not evaluated; however, the river and canyon views experienced by travelers and recreation visitors overlap many of the views experienced by residences within the corridor. The views from residences are important, as documented by the real estate value of view properties.

The scenes viewed most often include the mouth of the Klickitat as seen from Highway 14, the lower gorge area as seen from the Fisher Hill bridge, the river as seen from adjacent sections of Highway 142, the river and canyon walls from public recreation sites, and the canyon as viewed while boating the river.

The visual experience in each of these areas differs depending on the orientation of the viewer. For example, car travelers typically have high expectations for scenic beauty but the time spent in any one location, be it along the road or at pullouts, is relatively short. By contrast, while scenic quality is also important to boaters and anglers, their focus tends to be on the river, the shoreline, and the area immediately adjacent the shoreline; riparian buffers are therefore important to maintaining their aesthetic experiences

Riverscape Character and Quality. The 1,400-foot deep lower Klickitat canyon's most famous scenic feature is the bedrock gorge. Although less than 100 feet deep, the cliffs narrow to as little as eight feet apart and the water explodes through the gorge in continuous whitewater rapids. The visual appeal is accented by the tenuously-appearing dipnet fishing platforms and, during seasonal fish runs, by Native Americans fishermen practicing their art. The gorge and its dip-net fishery were featured as part of a recent article on Washington State published in National Geographic.

Another noteworthy feature is the visual diversity created by the undulating grassland and forest patterns that swirl across the rounded hills and deep draws. The dry grasslands, oaks and other deciduous trees and shrubs, spring windrlowers, and winter snows create distinctive seasonal color changes within the canyon. In the hot, dry summers, the river serves as an attractive, cool oasis.

The river outside of the gorge area maintains its own special visual appeal. Downstream from the gorge the river is a deep poof framed by low, exposed basalt walls. Upstream from the gorge the river is a meandering sequence of pools, riffles, and gravel bars. Banks are often framed by towering ponderosa pines. Views in the area upstream of the gorge also periodically include man-made objects such as the road, natural rock rip-rap, and, less frequently, structures.

Existing Management Practices Affecting Visual Resources. The draft plan for the Columbia River Gorge National Scenic Area designates the west bank of the Klickitat within CRGNSA boundaries as Open Space and the east bank as a transition zone between the river and town of Lyle, where some rural residential and recreation development may be appropriate.

The corridor has historically been protected by topography, relatively large public and private land holdings, and private landowners' stewardship. Besided the CRGNSA, the only law or management activity specifically addressed protecting or enhancing aesthetic resources within the viewshed of the lower Klickitat River is a county scenic overlay zone that restricts signs along roadways. The SMP provides some scenic quality protection within the immediate 200-foot shoreline, although the emphasis is on protecting natural resources and water quality rather than directly addressing scenic resources. Washington State has no management programs for scenic resources other than through the SEPA checklist, which is required only for specific activities such as converting commercial forest land to resort development. The State Forest Practices Act requires no visual resource considerations, although there is growing public pressure to amend the law

to address aesthetics, particularly in highly sensitive landscapes.

While aesthetic resources are not directly managed like water quality and fish, several laws and programs help to conserve visual quality. For example, Washington's Interagency Committee for Outdoor Recreation (IAC) manages the Federal Land and Water Conservation Fund, which can be used to acquire scenic properties. The DNR's Natural Heritage Program manages exemplary natural communities and T&E species sites, which serves to protect scenic values. The Washington Department of Ecology manages water quality and quantity, which also protects water appearance. Klickitat County zoning and state tax laws help to slow the conversion of agricultural and forest lands to other uses.

3.9 Native American Traditional Uses and Rights

Traditional Uses. Native Americans have inhabited the area along the Columbia river and its tributaries since before recorded history. These people, members of the plateau culture, evolved a rich culture that relied on the river and its corridor for fishing, hunting, food gathering and village sites. While many of these original inhabitants eventually were displaced by the treaties of 1855 and establishment of reservations to make way for the pressures of European settlement. There also was a gradual decline of the fisheries, Native Americans continue to live in the area and use the river for traditional purposes. The river also is used for these purposes by Native Americans living outside the river corridor, particularly by those living on the Yakima Indian Reservation.

Traditional Native American activities that continue to occur within the Klickitat River drainage include collecting of roots and berries, collecting of materials for basket weaving, hunting, and fishing. Along the lower river the primary traditional use, and one found to be an outstanding resource value, is Native American dip-net fishing (see Box 3-4).

The gorge is in a natural state except for a fish passage facility at the upstream end where a falls once impeded upstream fish migration. Fishing platforms and scaffolds line the gorge. Portions of the shoreline are owned by the Washington Department of Fisheries, the Washington Department of Natural Resources, the North Dalles Irrigation District, and a private landowner. The Department of Fisheries owns the entire west bank and a portion of the east bank, using its land to access the fishway and for conservation purposes. Native American fishermen are allowed access to the gorge through both treaty rights and informal landowner agreements.

The upland area on the west side of the river at the head of the gorge consists of individual allotments held in trust by The Box 3-4

Outstanding Resources: Native American Dip-net Fishery.

The dip-net fishery of the Klickitat gorge is regionally and quite possibly nationally significant. Native Americans have utilized dip-nets as a principal means of catching salmon and steelhead in the Columbia basin since before recorded history. The method was particularly well suited to areas with falls and rapids where the fish struggling to climb upriver would be forced to follow a defined route and expose themselves to the waiting fishermen. This fishing method was used historically at numerous falls along the Columbia and principal tributaries.

Of the mid-Columbia tributaries, the Klickitat was apparently one of the favored fishing sites, due to both the number of fish and because the river flowed through the inner Columbia area's narrowest highwater volume gorge. This bedrock gorge, located just upstream from the river's mouth, constricts the river's flow to form a set of continuous rapids, creating an ideal location for dip-net fishing.

Only on the Deschutes, at Sherar's Falls, and on the Klickitat, at the gorge near the river's mouth, has the traditional dip-net system of fishing continued in a manner similar to that before the coming of the dams. The lower Klickitat gorge area is especially valuable because of the number of available fishing locations and the spectacular, narrow gorge setting. The readily-viewable fishing platforms scattered along the gorge section are each registered with a family or group by a tribal administrative office; in some instances, these claims go back generations.

Department of the Interior and administered by the Bureau of Indian Affairs. These lands were originally allotted to individual members of the Yakima Indian Nation early in the century. These and other allotments in the Columbia River area carried rights similar to other privately held lands including the right to develop and, with some limitations, sell the property. These rights differ, however, because the Bureau of Indian Affairs, through the Yakima Indian Agency, must approve any sale. The Yakima Indian Nation maintains the right to purchase any trust lands that may be on the market. The Nation maintains a fund for such purchases and has historically been keenly interested in purchase of lands with high cultural or fisheries significance.

The issue of how trust lands are used is complex because lands have long since passed from original owners to their heirs. Where there was more than one heir, lands were passed to all in common. As a result, trust lands near the gorge have

multiple owners. Development of land requires agreement by all owners. When any one owner wishes to sell his or her share, a majority of other owners must agree to this and, when this occurs, other owners have the right of first refusal.

The safety of Native Americans fishing in the gorge is a major concern. Nine drownings occurred on the Lower Klickitat during the past three years (Gorman et al., 1989). All of these were in the gorge area and all were Native Americans. The Coyote Search and Rescue Team, a local Native American volunteer group, has performed a number of rescues of both Native Americans and non-Native Americans and hopes to expand its efforts to decrease the number of accidents and fatalities on the lower Klickitat. Preventive measures such as river safety training for Native American fishermen have been suggested. Concern has been raised regarding lack of coordination and communication between the Coyote group and Klickitat County search and rescue operations.

Treaty Rights. In 1855, the government of the United States and several central and eastern Washington tribal groups signed a treaty. Tribes and bands represented included the Klickitat and Wishram, the principal inhabitants of the Klickitat river basin. The treaty established these tribal groups as one nation, the Confederated Tribes and Bands of the Yakima Indian Nation. The treaty, under which the Tribes ceded certain lands to the United States for use by settlers, also created a reservation for use, benefit, and occupation as well as reserving specific tribal rights and privileges on lands outside reservation boundaries. These included the "privilege to hunt, gather, and pasture horses and cattle upon open and unclaimed land," which the courts have interpreted to mean all state and federal lands excluding national parks. The Yakima Indian Nation is the only tribal group with treaty reserved rights along the Klickitat River.

While the basis for Yakima tribal fishing rights was established in the 1855 treaty, these rights have been clarified through a series of court decisions. Three cases stand out: <u>United States v. Winans</u> (198 U.S. 371 (1905)); and <u>United States v. Washington</u> Phase I (384 F. Supp. 312 (W.D. Wash. 1974)), and <u>U.S. v. Oregon.</u>

<u>U.S. v. Winans</u> confirmed that the treaty right endured when Washington's entry into the union and further concluded that tribal fishing rights included the right to cross private lands to access fishing areas. <u>United States v. Washington</u> expanded on this. In Phase I (commonly referred to as Boldt I) the court found that access to fishing locations did not, in and of itself, meet the terms of the 1855 treaty. In addition, treaty Indians had the right "to take fish in common with the citizens of the territory," (at 343) or, more directly, were entitled to a maximum of 50 percent of the harvestable fish.

<u>U.S. v. Oregon</u> positioned treaty Tribes, including the Yakima Indian Nation, to be active participants in the management of fish. Recent federal legislation indicates that Congress supports this idea. The Pacific Northwest Power Planning and



Native American dip-net fishing in the gorge.

Conservation Act (16 U.S.C. 839 (1980)) made clear this relationship with regards to fish restoration in the Columbia Basin. The Electric Consumers Protection Act (P.L. No. 99-495, 16 U.S.C. 808 (1986)) reaffirmed the role of Tribes in fish management, this time with regards to licensing of hydropower projects. Today treaty Tribes and state and federal resource agencies actively cooperate in Columbia Basin fish management. The Columbia River Fish Management Plan, the U.S.-Canada Pacific Salmon Interception Treaty, and the Columbia Basin Systems Plan all were heavily influenced by Tribal participation. Treaty Tribes also actively participate in land use issues that may affect anadromous fish, including forest planning and wilderness designation, in The Forest Service consultation process.

The net effect of years of caselaw and agreements between the state, the federal government, and the Yakima Indian Nation has been to affirm or define treaty reserved rights regarding the Indian Nation's continued exercise of off-reservation reserved rights along the Klickitat River. These rights may not be abridged and must be fully recognized and accounted for in the development and implementation of the river management plan.

Protection of Sacred Areas. In common with many cultures, the Native Americans of the Columbia plateau have certain areas that hold special religious meaning. Of paramount concern are ancestral grave sites and traditional locations for cultural and spiritual ceremonies including quest sites. The American Indian Religious Freedom Act established the right of all Native Americans under U.S. jurisdiction to practice their religions and to have access to sacred places on federal lands. This law has little effect in the lower Klickitat River corridor because only 200 acres are in federal ownership.

In Washington State, the Indian Graves and Records Act (RCW 27.44) requires that all prehistoric and historic Indian burial grounds and cliff drawings found on state or private lands be preserved. Other laws, described in Section 3.10, also protect Native American historical sites.

3.10 Archaeological and Historic Resources

Cultural resources identified with this section of the Klickitat River include prehistoric and historic Native American sites and historic sites associated with European settlement.

Prehistoric and Historic Indian Sites. There has been limited investigation of prehistoric or historic

Native American resources within the Klickitat drainage, but one major pre-historic/historic settlement is known to have existed along the designated segment -- a year-round Klickitat Indian village near the mouth of the river. This village, which housed approximately 200 people, was noteworthy because it was the only permanent Klickitat Indian settlement along the Columbia. Another settlement, located near the confluence of the Klickitat and Little Klickitat above the designated section, apparently served as a central gathering place for Indians throughout the drainage.

The year-round village has not undergone detailed archaeological analysis so its eligibility for registration as either a state or federal historic site is unknown. No systematic, area-wide archeological evaluation has been undertaken; it is therefore not known whether other settlements or use sites might be located in the vicinity. Given available evidence, there is a high probability that additional sites do exist.

Historic Sites Relating to European Settlement. The Lewis and Clark expedition was the first European incursion into the Klickitat area. Expedition journals referred to the river as the "Cascade" or "Caterack" River, suggesting they ventured at least as far upstream as the gorge section. Journals also noted Native American fishdrying racks near the river's mouth. The expedition did not camp at the Klickitat and there is no on-the-ground evidence of its passing, nor of later military or mapping expeditions.

The Klickitat River valley was, and continues to be, largely devoted to ranching. Early ranch buildings still stand in the corridor and wagon wheel tracks dating from the mid-to-late 1800's have been found in the area. None of these sites have been investigated in detail or included on federal or state registers. The railroad bridge that crosses the Klickitat near its mouth is included on the National Register of Historic

Places. The nearby Highway 14 bridge was included in the Washington Office of Archaeology and Historic Preservation's State Inventory of Historic Places but has not been registered.

Protection of Archaeological and Historic Resources. Federal and state laws protect many river related prehistoric and historic cultural resources. The principal federal law is the National Historic Preservation Act of 1966 (PL 89-665, 16 USC 470). The corresponding state law is the State Historic Preservation Act (RCW 27.34), an act relating to historic sites and properties. Other relevant state laws include the Archaeological Sites and Records Act (RCW 27.53), an act relating to archaeological sites and records, and the Indian Graves and Records Act mentioned above.

The National Historic Preservation Act established the National Register of Historic Places. The state's Historic Sites and Properties Act established a State Register for Historic Preservation. While they differ in some respects, the intent of both laws is to give recognition to and encourage protection of places having historic significance.

Properties important in history, prehistory, architectural history, engineering history, archaeology, or culture may be entered in either, or both, registers. The eligibility criteria for both are similar and include: 1) association with events that have made a significant contribution to the broad patterns of our history; 2) association with the lives of persons significant in our past; 3) embodiment of distinctive characteristics of a type, period, or method of architectural construction; or 4) yielding of information important in prehistory or history.

Section 106 of the federal act requires that a review be conducted prior to undertaking any federal action that might affect a site that is on or is eligible for the register. This provision also extends to properties that possess significance but that have not been listed or formally determined eligible,

Box 3-5

Outstanding Resources: Geology.

The lower Klickitat River gorge is only a mile long and only 20 to 40 feet deep but narrows to less than eight feet at one location. No other river in the region discharges this amount of water (average daily flow of 1,650 cfs, measured at Pitt) through such a narrow gorge, making it a regionally significant resource. In addition, the lower Klickitat River gorge is easily viewed from many locations and has been utilized extensively as a native subsistence fishing site for generations. Each of these factors adds substantially to the overall significance of the gorge.

including sites as yet unknown. Federal actions that might trigger this review include construction, property transfers, licenses and permits, loans, and other similar activities.

The purpose of the 106 review is to determine if a site would be adversely affected and, if so, to identify ways to avoid or mitigate the adverse effect. The act does not grant the authority to stop a project to preserve a historic site; rather, it mandates that historic resources be "taken into account." The state's Historic Sites and Properties Act has a similar review procedure.

The state's Archaeological Sites and Records Act (RCW 27.53) regulates disturbance of archaeological sites on state or private lands by requiring that a permit be received from the state prior to disrupting or removing archaeological artifacts. The Indian Graves and Records Act, discussed in the section on Native American sacred areas, requires preservation of prehistoric and historic Indian burial grounds and cliff drawings found on state or private lands.

The agencies charged with carrying out federal and state historic preservation laws include, at the federal level, the Advisory Council on Historic Preservation and the National Park Service, and, at the state level, the Washington Office of



One of the narrowest sections of the gorge. A possible gorge overlook site is located where the highway rounds the curve at the upper right (view north from RM 2).

Archeology and Historic Preservation. Each has distinct duties. In practice, however, Washington's historic resources are managed through a partnership between the state and federal agencies. With this partnership the state typically takes the lead in review of potential impacts to registered or potential historic places. The National Park Service provides technical assistance as warranted. The Park Service retains the option of making an independent evaluation as does the Advisory Council on Historic Preservation. Independent federal review is common with hydropower permits and rare with timber harvest and land development activities.

3.11 Geology and Soils

The geology of the Klickitat River, like that of the entire region, is dominated by the effects of Cascade volcanism, basalt extrusion, and glacial erosion and deposition. The lower Klickitat flows through a canyon incised into basalt flows of the Columbia River Group that are 2,000 feet thick in some areas (Anderson, 1987). Repeated fissure eruptions during the

Box 3-6

Outstanding Resources: Hydrology.

The Klickitat River is the second longest free-flowing river in the state of Washington (only the Chehalis is longer). The majority of rivers of this size in the northwest have at least one dam along their course. At 96 miles long, the Klickitat is second only to the John Day River as the longest free-flowing river in the Lower Columbia River subregion. Therefore, it is considered a regionally significant value

The Klickitat's free-flowing character provides scientific, educational, recreational, and fish and wildlife benefits. Rivers whose flow is not impounded at any point provide opportunities to observe the natural cycle of flood and scouring along with unaltered streamside vegetation. Such free-flowing waterways offer opportunities to study and compare riverine and riparian ecosystems.

The two soda springs that flow into the river add to hydrologic value. Carbon dioxide charged springs are very rare in the state, occurring only in a few locations. The first, referred to as the "Soda Springs," is located on the Klickitat River near RM 24.5 several miles above the mouth of the Little Klickitat River. The dissolved solids content of these springs are much higher than any others found in the Columbia Plateau (Brown, 1979). The second is the Klickitat Mineral Springs and historic commercial ice house on the river near Wahkiacus.

Miocene deposited a thick sequence of basalts (the Columbia River Group) which forms the most widespread geologic unit in this area (Brown, 1979; Korosec, 1987a). More recent geologic formations reflect periods of volcanic activity and glaciation during the past two million years. These include basaltic and andesitic lavas from the Mt. Adams, Indian Heavens, and Simcoe Mountain eruptive centers that are interfingered with deposits of mountain and ice sheet glaciation (Vallance, 1986; Korosec, 1987b). These deposits cap the Columbia River Group in higher elevation areas.

Sediments associated with the catastrophic Missoula Floods, which formed the Channeled Scablands of the Columbia Basin between 15,300 and 12,700 years ago (Waitt, 1985), are present along the west side of the Klickitat River near its confluence with the Columbia.

The lower Klickitat gorge, although only about one mile long and less than 100 feet deep, is extremely narrow (less than eight feet in one location) for a river the size of the Klickitat (Land and Water Associates, 1989). The gorge's many characteristics make it an outstanding resource (*see Box 3-5*). In the lower reach of the study area, the Klickitat valley broadens and includes sand, silt, and gravel deposits of the Missoula Floods (Walsh et al, 1987).

Soils in the lower Klickitat River corridor vary with the local topography and characteristics of the substrate. The corridor is dominated by fluvial deposits adjacent the river and steep bedrock and talus slopes (the canyon walls) leading up to the higher plateau area. Soils developed on the fluvial deposits are primarily Fluventic Haploxerolls (a riverwash complex) developed on low river terraces and islands, mainly next to the river or within the channel. The parent material is mixed river sediment, ranging from silt to extremely cobbly sand, with soil typically at least 60 inches thick. In low areas of the flood plain, there is potential for significant erosion and deposition as a result of flooding.

In the lower stretch of the Klickitat River, the riverwash complex occurs most typically as deposits on the inside face of river meanders. On the steeper slopes (8 to 30 percent) above the riverwash, Gunn loams are developed on loess (glacial silt) and volcanic ash overlying basalt residuum. The Gunn loam is a stable, well-drained, stony loam which are up to 45 percent basalt fragments and stones on the surface in some areas. It has a low to moderate erosion potential, depending on the local slope angle.

Opposite the point bars, on the cut slopes of the meander forms, steep to moderately steep side slopes are dominated by rock outcrop/rubble soil complexes (including Leagll, Leidl, Oreoke, and Mazdale variants), generally thin to moderately deep, very cobbly and gravelly, with 30 to 80 percent basalt fragments. These soils are unstable and susceptible to erosion in both natural and disturbed states. Fractured basalt is found in extensive outcrops or closely underlies the surface of steeper slopes.

3.12 Fish and Instream Resources

Streamflow. The Klickitat River, draining an area of over 1,300 square miles (Brown, 1979), is the second longest free-flowing stream in the State of Washington. The integrity of the river's hydrological system makes this an outstanding resource, especially when coupled with the river's other hydrologic features (see Box 3-6). The main stem of the Klickitat River is nearly 96 miles long, from the Goat Rocks area of Yakima County to its confluence with the Columbia River. The river gradient in the lower Klickitat is steady and moderate, averaging about 26 feet per mile.

Much of the upper Klickitat's discharge comes from its upper watershed in western Yakima County, including the eastern slopes of Mount Adams where annual precipitation often exceeds 100 inches (Brown, 1979). Approximately 90 percent of the discharge of the lower Klickitat comes from the upper Klickitat, with the remainder supplied primarily by the Little

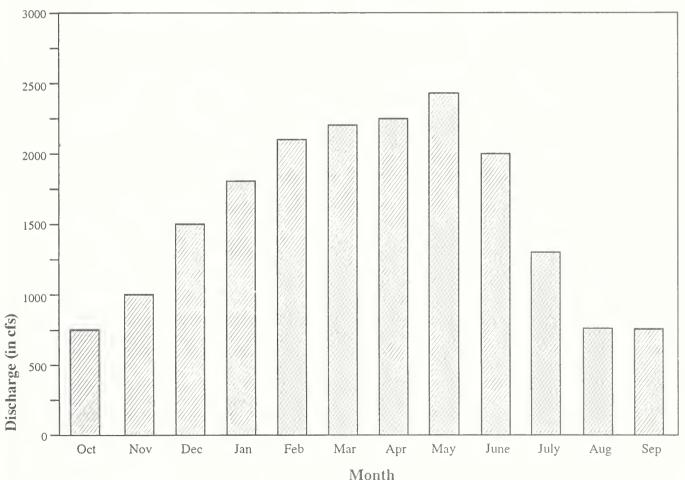
Klickitat River, which joins the main river north of Wahkiacus. Although the Little Klickitat River typically supplies about 10% of the mean annual flow of the Klickitat River, during individual storms the Little Klickitat has supplied up to 37% of the discharge of the main river (Brown, 1979).

The annual hydrograph of the Klickitat River at RM 7.0 (see Figure 3-3) is characterized by a steady increase in flows during the winter wet season, rising to a peak during spring snowmelt. The mean annual flow, as measured near Pitt, is about 1,650 cubic feet per second (cfs). Flows are relatively low during the drier summer months, partially due to withdrawals from the Little Klickitat River and Swale Creek. tributaries to the Klickitat. Yet summer flows still exceed 750 cfs, largely due to the sustained input from snow and ice melt high in the river's source area on Mount Adams. Snowpack meltwater makes up a large percentage of the annual discharge of the Klickitat River (Brown, 1979), but much of the winter flow comes from rainfall in the middle and lower parts of the river basin.

(Figure 3-3)

Average Monthly Discharge of the Klickitat at RM 7.9, 1909 - 1985.

(from Bechtel, 1981)



The Department of Ecology's Water Rights Information System reports that, as of May 2, 1990, water rights have been issued for the consumptive use of 13 cfs of surface water and 285 gallons per minute of groundwater between Summit Creek and the mouth of the Klickitat. These water rights, mostly for irrigation (although some are for domestic use), include all issued since 1917. Surface water rights include withdrawals from tributaries as well as from the mainstem Klickitat. Most of the groundwater rights were issued to the Klickitat Public Utility District #1 and are used for domestic water distribution.

water Quality. Water quality is monitored systematically at only one location on the Klickitat River, near the town of Pitt (DOE, 1989a). The lower Klickitat River from the mouth to RM 19.8 at the confluence of the Little Klickitat River is rated Class A (excellent). However, the State of Washington considers this rating to be threatened due to marginal temperature conditions and the quantity of suspended solids, both due to natural causes (DOE, 1989b).

Box 3-7

Outstanding Resources: Anadromous and Resident Fish.

The Klickitat River supports the most significant anadromous fishery on the Washington side of the Columbia in the stretch from the Bonneville Dam to the Snake River. The Klickitat was judged to be the second most important anadromous fish habitat of all rivers in both Washington and Oregon draining to this reach of the Columbia.

Features which distinguish the anadromous fishery on the Klickitat include the presence of a traditional Native American dip net fishery, the quality of the river's habitat, the number of anadromous species present, the number and size of runs, and recreational as well as historical significance.

Klickitat spring chinook play a critical role in meeting the subsistence fishing needs of the Yakima Tribe and fulfilling the treaty share of tributary harvest for the entire Columbia Basin. The significance of the fishery is borne out by large Tribal catches (23,000+ coho) and sustained sport catches in recent years. The river provides one of the few opportunities for spring chinook harvest in the area because basin stocks are generally at low levels.

The section from the head of the gorge upstream to Pitt also was rated as outstanding for resident fish. Many of the same characteristics providing anadromous fish habitat also support abundant, good-sized rainbow trout and whitefish.

Temperatures during the summer months have been recorded as high as 65 degrees fahrenheit at RM 7 (U.S. Geological Survey, 1989). These temperatures are not warm enough to have detrimental effects on cold water fisheries, but are high enough to warrant caution in planning any future developments which may potentially affect river temperatures. The warm water temperatures in the river are primarily due to natural low flows, warm air temperatures, and high solar radiation during the summer months. Water withdrawals during the summer in the Little Klickitat River and other tributaries may contribute to high summer temperatures (Yakima Indian Nation, et al., 1989). Riprap along the banks displaces normal riparian vegetation and also contributes to higher temperatures.

Turbidity in the river is often high, particularly during peak discharge periods. The major sources of sediment are natural glacial melt and discharge from particularly turbid upstream tributaries including Big Muddy Creek and the Little Klickitat River. Logging, grazing, and other uses can cause short-term increases in sedimentation but these appear to be minor compared to the other sources (Yakima Indian Nation, et al., 1989).

Anadromous and Resident Fish. The habitat for anadromous and resident fish in the Klickitat River is generally excellent. When combined with the size and number of fish runs and other features, both anadromous and resident fish qualify as outstanding resource values (*see Box 3-7*).

The Klickitat River supports runs of three species of anadromous fish—steelhead trout, chinook salmon, and coho salmon—comprising six distinct runs: summer and winter steelhead; spring and fall chinook; and early and late coho. These runs are highly significant because relatively large numbers of steelhead and chinook are present and the Klickitat is one of the few rivers in Washington supporting spring chinook runs.

The summer steelhead runs are estimated to be two-thirds hatchery production and one-third natural. The winter steelhead run is entirely natural and the fishery is managed to protect the run. The spring chinook run in the Klickitat is supported primarily by hatchery releases although some natural spawning is known to occur. Neither fall chinook nor coho salmon are native to the Klickitat River; runs of both have been established by hatchery plants. Coho production is believed to depend entirely on hatchery releases and the fall chinook runs depend largely on hatchery production, although some natural spawning is thought to occur.

The river is recognized as an important sport fishery for summer steelhead in the state of Washington. Reported sport catches are significant when compared with other similar angling opportunities within the region, especially on the Washington side of the Columbia. Spring chinook are important contributors to the Yakima tribes' subsistence fishery and the tribal commercial fishery. All salmon

populations of the Klickitat River are also utilized by the Columbia River and offshore commercial fishing industry (Yakima Indian Nation, et al., 1989).

Above the gorge area, good fish habitat is distributed fairly uniformly throughout the river. The gorge reach itself is an area where the river is constricted and the substrate is primarily bedrock. As a result, the gorge reach lacks spawning and rearing habitat. Lyle Falls, located within the gorge reach, is believed to be a partial block to upstream movement of some species of anadromous fish, particularly during periods of low flow in late summer and early fall (Bryant, 1949). Passage of fish upstream of the falls was enhanced in 1952 when rock was removed from the falls and fishways were constructed.

The potential significance of the river is even greater than existing runs indicate. The river appears to be producing both chinook salmon and steelhead well below its capacity. Varying flows, sediment loads, warm summer water temperatures, and passage of Castile Falls (Rm 64) also have been cited as potential limits to productivity. As part of the sub-basin planning process, strategies have been identified to address these constraints. In addition, the planned Yakima/Klickitat Hatchery (well above the lower Klickitat) will increase runs and help rebuild natural runs of steelhead and Chinook thus enhancing the fishery value of the river. Improvements also are planned at the fish ladder at RM 2.5, including a possible fish entrapment and transportation facility.

Currently, the Columbia Basin System Plan is being developed jointly by state and federal resource management agencies, Tribes, and the Northwest Power Planning Council. This process has been undertaken pursuant to U.S. v. Oregon and U.S. v. Washington, which mandated equitable use of salmonid resources between treaty and non-treaty fisheries and provided for protection against environmental degradation of spawning and rearing areas. The Plan is designed to enhance salmon and steelhead production throughout the Columbia River watershed, including the Klickitat River. Although the measures that will be used to augment and restore the runs in the Klickitat River have not yet been finalized, future fisheries projects are certain to include the development of the Yakima/ Klickitat fish hatchery near Summit Creek. This hatchery will be used to enhance natural runs in the region and to contribute to research on methods of improving production (Yakima Indian Nation, et al., 1989). Other future projects are likely to include efforts to reduce sediment inputs, enhance riparian habitat, and improve hatchery practices.

In addition to the significant salmon resources in the Klickitat River, resident fisheries for rainbow trout, cutthroat trout, and whitefish also are supported. Currently, the Klickitat River's resident fish populations are not enhanced by hatchery plants. However, fingerling and legal size cutthroat trout are planted in several of the tributaries to the river (Weinheimer, 1989). The trout and whitefish populations in the Klickitat River are generally distributed throughout the length of the river, up to and beyond Summit Creek. Sport fishing in the lower study

section is concentrated in the stretch from Pitt down to the head of the gorge (Land and Water Associates, 1989).

3.13 Vegetation

The Klickitat River lies on the eastern edge of a major physiographic transition zone where a marine climate grades into a continental climate, resulting in a diverse mixture of microclimates and plant habitats. In addition, the lower Klickitat is strongly influenced by the climate of the Columbia River Gorge. The Gorge, a near-sea level route across the Cascades, has provided a major migration route for many plant and animal species between marine and continental environments. Major plant communities in the lower study section include ponderosa pine (Pinus ponderosa)/Oregon white oak (Quercus garryana), Oregon white oak/grassland, and open grassland. This area also supports a variety of plants, including endemics and relict populations, that grow only in the climatic transition zone between the Wind and Klickitat rivers (Land and Water Associates, 1989).

Plant Communities. Between its confluence with the Columbia River and about RM 3, the lower Klickitat River flows through a well-defined canyon, often with vertical rock sides. Between RM 1.5 and RM 2.5, this canyon is the narrowest gorge in the region (Land and Water Associates, 1989) and supports no riparian vegetation. In a few locations, willow (Salix sp.) and alder (Alnus sp.), have established in rock crevices and in narrow bands or patches.

Above RM 3 the river channel broadens, supporting a narrow but well-developed riparian community along most of its length. Relatively large areas of riparian vegetation have established on islands and on gravel bars that occur in broad river bends. These communities contain black cottonwood (<u>Populus angustifolia</u>), in addition to willow and alder. In many locations the riparian vegetation, particularly understory grasses and forbs, has been degraded by grazing. Additional disruption of the riparian zone stems from roads that parallel the river throughout the entire designated section.

Upland vegetation throughout most of the lower Klickitat corridor is characterized by a mixture of Oregon white oak and ponderosa pine. Most slopes in this area (particularly those facing south and west) support primarily the Oregon white oak/grassland community. The understory in upland areas generally includes a variety of shrubs such as deerbrush (Ceanothus integerrimus) and Oregon grape (Mahonia aquifolium). Common grasses include wheatgrasses (Agropyron spp.), bluegrasses (Poa spp.), pinegrasses (Calamagrostis spp.), bromes (Bromus spp.), and fescues (Festuca spp.) (Washington Department of Wildlife, 1972).

There are no known areas within the lower Klickitat corridor that support plant communities that are unique within the region (Land and Water Associates, 1989).

Table 3-3							
Rare Plants in the	Lower	Klickitat	Corridor ¹				

Species .	Common Name	Federal ² status	R6² list	State ² Status	Distribution
Astragalus hoodianus	Hood River milk-vetch			S	Regional endemic
Githopsis specularioides ³	Common bluecup			S	Scattered
Heuchera grossularifolia var. tenuifolia	Gooseberry-leaved alumroot			S	Scattered
Lomatium suksdorfii	Suksdorf's desert-parsley	C2	S	T	Local endemic
Meconella oregana	White meconella			S	Scattered

- 1 Sources: Bakke et al., 1988; Land and Water Associates, 1989
- S = sensitive; T = threatened; E = endangered; C2 = Category 2
- 3 Located between the mouth of the Klickitat River and Wide Sky Canyon, exact site unknown.

Plants. There are no known plants in the lower Klickitat corridor or in Washington state that are federally listed as endangered or threatened. However, a survey conducted from May 22 to June 29, 1989, of the areas within one-half mile of the Klickitat River identified five species in the study section (see Table 3-3) that are listed by the Washington Natural Heritage Program (WNHP) as threatened or sensitive (Bakke et al., 1988). State threatened plants are species likely to become endangered in the near future in Washington if factors contributing to their population decline or habitat loss continue (WNHP, 1987). Plants classified as sensitive are species with populations that are vulnerable or declining, which could become endangered or threatened in the state without removal of threats or active management (WNHP, 1987).

The one state threatened plant found in the designated corridor, Suksdorf's desert-parsley (<u>Lomatium suksdorfii</u>), also is classified as a category 2 federal candidate species and is on the list of sensitive species of the USDA Forest Service, Region 6 (USDA Forest Service, 1989). Suksdorf's desert-parsley also is a local endemic, occurring only in dry, open habitats in Klickitat County (WNHP, 1987; Hitchcock and

Habitat data and other sightings in the vicinity of the lower Klickitat River, suggest that 15 other plants (see Table 3-4) classified by the WNHP as endangered, threatened, or sensitive that may occur within the study section (USDA Forest Service, 1989). State endangered plants are species likely to become extinct in the near future in Washington if factors contributing to their population decline or habitat loss continue (WNHP, 1987). A total of four state listed threatened plants potentially occurring in the study section, long-bearded sego lily (Calochortus longebarbatus), pale blue-eyed grass (Sisyrinchium sarmentosum), Barrett's beardtongue (Penstemon barrettiae), and Oregon sullvantia (Sullivantia organa), also are classified as category 2 federal candidate species. Fourteen state listed species potentially occurring in

Cronquist, 1973). Hood river milk-vetch (<u>Astragalus hoodinaus</u>), a state sensitive species, is a regional endemic, occurring only in upland areas in Klickitat and Benton counties. Another sensitive species, gooseberry-leaved alumroot (<u>Heuchera grossularifolia</u> var. <u>tenuifolia</u>), is found only in riparian areas in Klickitat County and the Columbia River Gorge (WNHP, 1987; Hitchcock and Cronquist, 1973). Along the lower Klickitat, there are 10 occurrences of Suksdorf's desert parsley, one of Hood River milk-vetch, and 21 of gooseberry-leaved alumroot. Suksdorf's desert-parsley is found primarily in the upper five miles of the corridor, while gooseberry-leaved alumroot is found mainly in the lower five miles. Sightings of the other three state sensitive species are scattered throughout the study section.

^{8.} Category 2 candidate species include taxa with information indicating that proposed listing as threatened or endangered is possibly appropriate, but substantial data on biological vulnerability and threats is lacking (50 CFR Part 17).

Table 3-4 Rare Plants Species Potentially Occurring in the Lower Klickitat Corridor

Species	Common Name	Federal ² Status	State ² Status	Distribution
Calochortus longebartus	Long-bearded sego lily	C2	Т	Regional endemic
Collinsia sparsiflora	Few-glowered collisina		S	Peripheral
Cyperipedium calceolus var. parviflorue	Yellow lady-slipper		Е	Scattered
Cyperipedium fasciculatum	Clustered lady's slipper		Т	Scattered
Cryptantha rostellata	Beaked cyrptantha		S	Peripheral
Epipactis gigantea	Giant helleborine		S	Scattered
Hackelia diffusa var. diffusa	Diffuse stickseed		S	Scattered
Linanthus bakeri	Baker's linanthus		S	Peripheral
Lomatium laevigatum	Smooth desert-parsley		S	Local endemic
Mimulus pulsiferae	Pulsifer's monkey-flower		S	Scattered
Mimulus washingtonensis	Washington monkey-flower		S	Scattered
Navarretia tagetina	Marigold navarretia		T	Peripheral
Penstemon barrettiae	Barrett's beardtongue	C2	Т	Local endemic
Sisyrinchium sarmentosum	Pale blue-eyed grass	C2	Т	Local endemic
Sullivantia oregana	Oregon sullivantia	C2	Т	Local endemic

¹ Source: Bakke et al. 1988; USDA, Forest Service, 1989

the study area are also on the USDA Forest Service Region 6 list of sensitive species (USDA Forest Service, 1989;1990)

3.14 Wildlife

Big Game. Deer, the most common big game species in the lower Klickitat corridor, are a cross between black-tailed deer (Odocoileus hemionus columbianus) and mule deer (O. hemionus hemionus) (WDW, 1972). The lower section is not as important to wintering deer as the upper study section

because of human disturbance, less varied topography, and fewer vegetation types (Land and Water Associates, 1989). Nonetheless, this area does contain abundant and diverse browse, including Oregon white oak, ceanothus, Oregon grape, and mock orange (Philadephus lewisii) and supports both resident and wintering migratory deer. The river corridor is an important migration route for deer and other wildlife species. In addition, this area also probably supports black bear (Ursus americanus) and a few elk (Cervus elaphus) during severe winters.

S = sensitive; T = threatened; E = endangered; C2 = Category 2

Other Species. No wildlife studies have been conducted in the lower Klickitat corridor, but the area is known to support a wide variety of small mammals, passerine birds, upland gamebirds, and raptors. Common mammals probably include voles (Mictrotus spp.), the Nuttall's cottontail (Sylvilagus nuttalli), yellow-pine chipmunk (Eutamias amoenus), and porcupine (Erethizon dorsatum). Furbearers, such as river otter (Lutra canadensis), beaver (Castor canadensis), and muskrat (Ondatra zibethicus) probably also occur.

Passerine birds in the lower study section most likely include the northern flicker (Colaptes auratus), Lewis' woodpecker (Asyndesmus lewis), hairy woodpecker (P. villosus), dusky flycatcher (Empidonax oberholseri), Steller's jay (Syanocitta stelleri), western bluebird (Sialia mexicana), yellow warbler (Dendroica petechia), American dipper (Cinclus mexicanus), and dark-eyed junco (Junco hyemalis). The blue grouse (Dendragapus canadensis), ruffed grouse (Bonasa umbellus), California quail (Lophortyx californica), chukar (Alectoris chukar), and Merriam turkey (Meleagris gallopavo) are probably the most common upland gamebirds in the study section (WDW, 1972). The Merriam turkey, introduced into the Columbia Gorge, has survived well and expanded into other suitable lands such as the Klickitat River drainage. The oak/conifer stands found in the corridor provide important habitat for the turkey, which feeds on acorns and nuts. It roosts on the large limbs of ponderosa pine.

Raptors in the area likely include the red-tailed hawk (<u>Buteo jamaicensis</u>), golden eagle (<u>Aquila chrysaetos</u>), American kestrel (<u>Falco sparverius</u>), pygmy owl (<u>Glaucidium gnoma</u>), and great horned owl (<u>Bubo virginianus</u>).

A wildlife study on a 25-mile stretch of the Klickitat River between Lyle and Stimpson Flats was conducted during the summer of 1989 (Manuwal, 1989). Fifty-eight bird species were recorded, including 43 in upland areas and 36 in riparian areas (some species were found in both areas). None of these species are state or federally listed as threatened, endangered or sensitive and none are included on the USDA Forest Service Region 6 list of Sensitive Species.

Sensitive, Threatened and Endangered Wildlife. One federally listed threatened species, the bald eagle (<u>Haliaeetus leucocephalus</u>), has been documented in the lower Klickitat corridor. The section also contains habitat for several state sensitive wildlife species. The peregrine falcon (<u>Falco peregrinus</u>), a federal endangered species, may also occur in the study section occasionally during the winter (USDA Forest Service, 1989).

A total of 44 bald eagle observation were made on the Klickitat and Little Klickitat rivers during aerial surveys conducted from mid-December 1988 to mid-March 1989 (Ichisaka et al., 1989). Abundance peaked at 12 eagles during the third week of January but remained fairly constant from mid-January until mid-March. Most of the eagles observed during the surveys were within the Klickitat Wildlife Area (41 percent) upstream

from the designated segment or at the confluence of the Klickitat and Columbia rivers (29 percent).

Within the lower study section, a total of 13 bald eagle observations were made at the mouth of the Klickitat River and eight between RM 8 and RM 10. Most of the bald eagles sighted in the study section were probably associated with coho or chinook salmon (Oncorhynchus kisutch and O. tshawytscha) carcasses. During the surveys, bald eagles at the mouth of the Klickitat River were observed on two occasions successfully preying on live fish (Ichisaka et al., 1989).

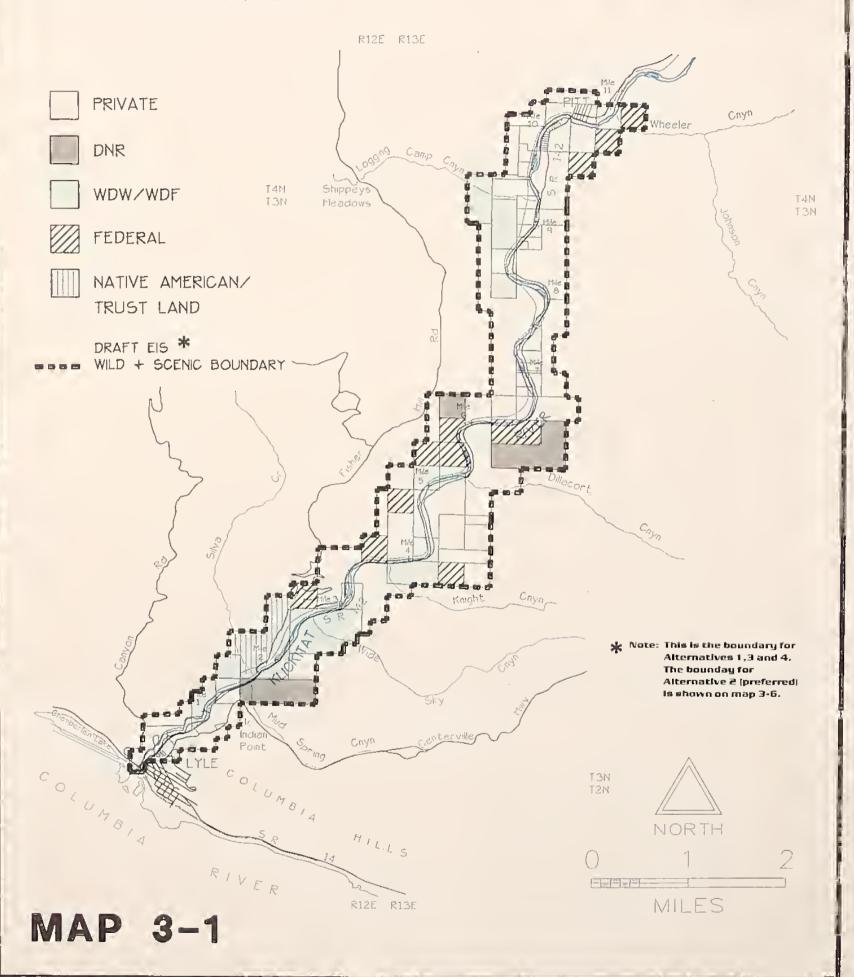
There are no suspected or confirmed bald eagle roost sites in or near the lower Klickitat corridor. The closest confirmed bald eagle roost site is in the upper Klickitat study segment upstream from the confluence of the Little Klickitat River (Land and Water Associates, 1989). This roost is used by 3 to 14 eagles and appears to be associated with several important forage areas nearby (Ichisaka et al., 1989). A smaller roost, used by as many as four bald eagles, is located along the Little Klickitat River.

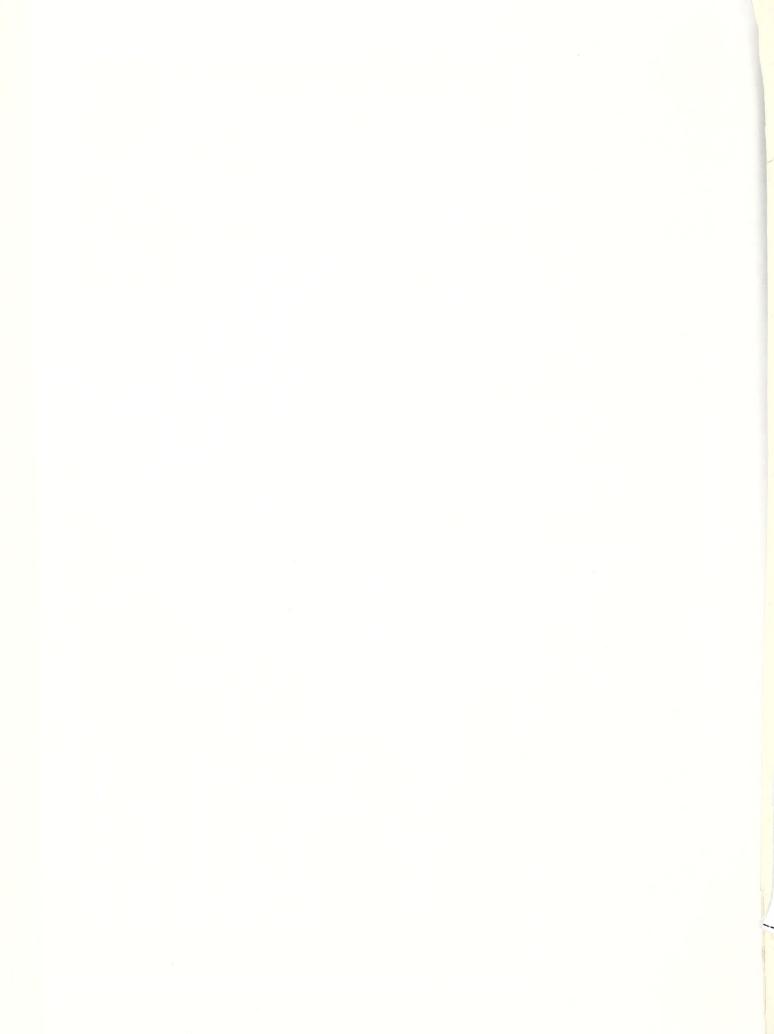
Other Species of Concern. A pair of golden eagles, a proposed state sensitive species, has been documented nesting in a tree between Wide Sky and Wheeler canyons (RM 10.5) (Land and Water Associates, 1989). The river corridor also contains habitat suitable for another proposed state sensitive species, the western grey squirrel (Sciurus griseus), although it has not been sighted (Land and Water Associates, 1989).

Between the mouth of the Klickitat River and Wide Sky Canyon, the river corridor contains habitat suitable for the western pond turtle (Clemmys marmorata), a state threatened species, and the larch mountain salamander (Plethodon larselli), a proposed state threatened species (WDW, 1988). Both the western pond turtle and the larch mountain salamander also are category 2 federal candidate species. No sightings of either of these species have been documented (Land and Water Associates, 1989).

MAP 3-1

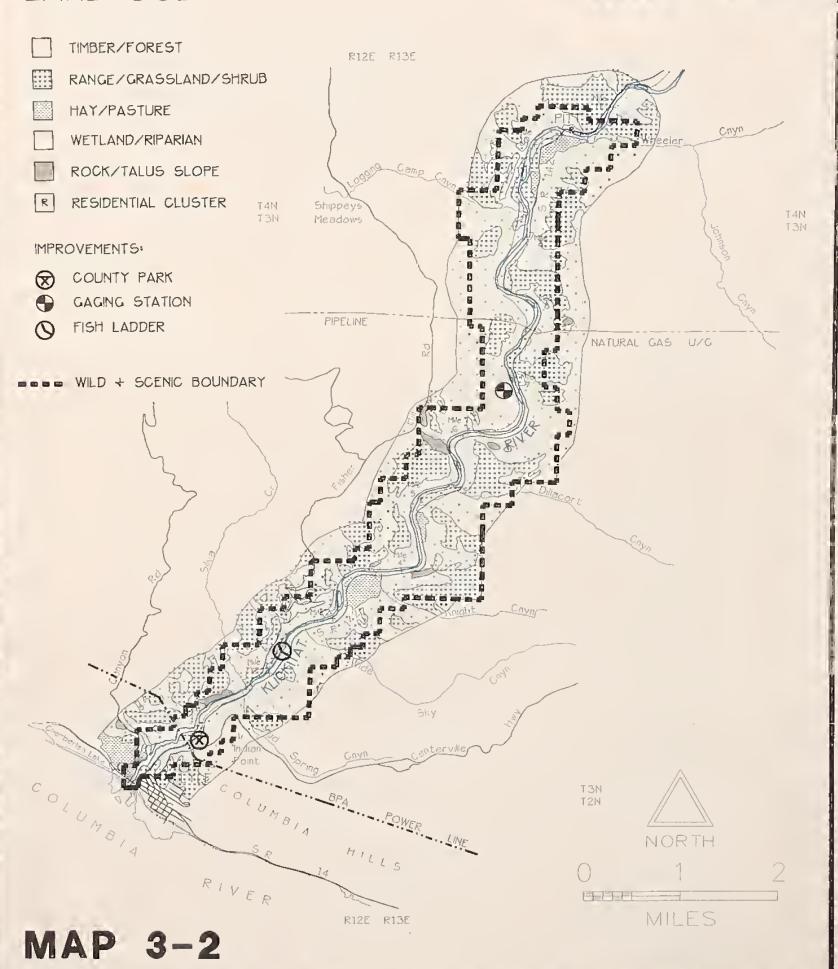
LAND OWNERSHIP





LAND USE

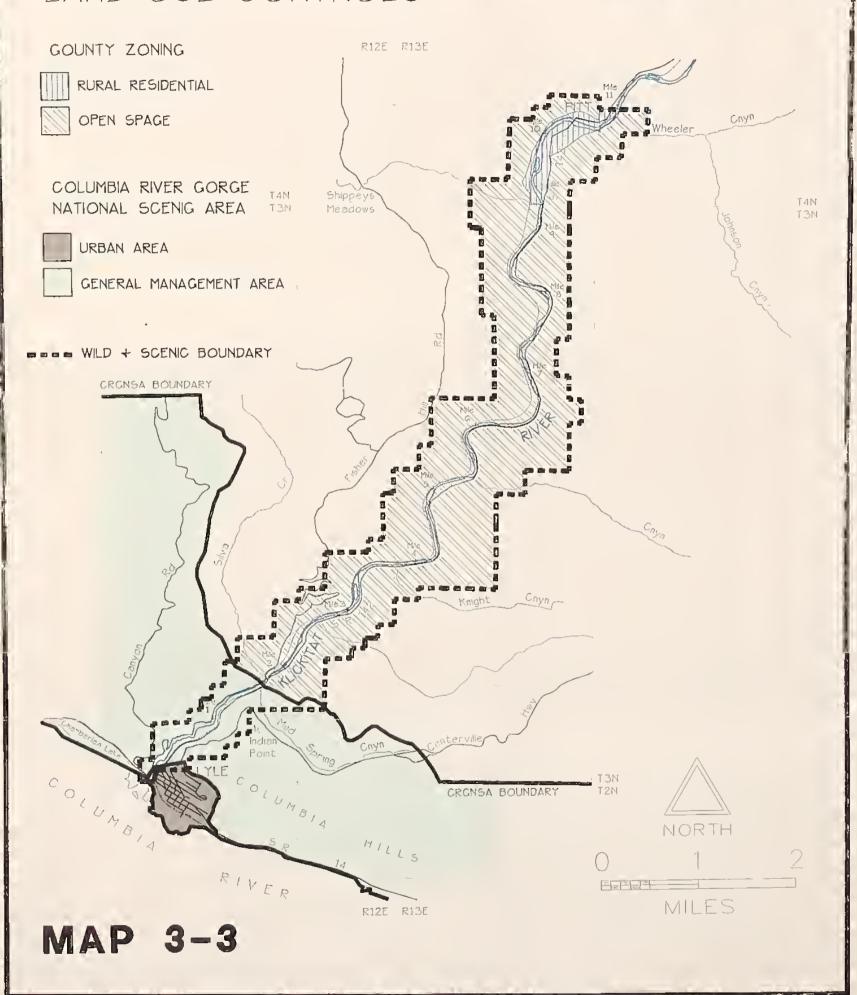
MAP 3-2





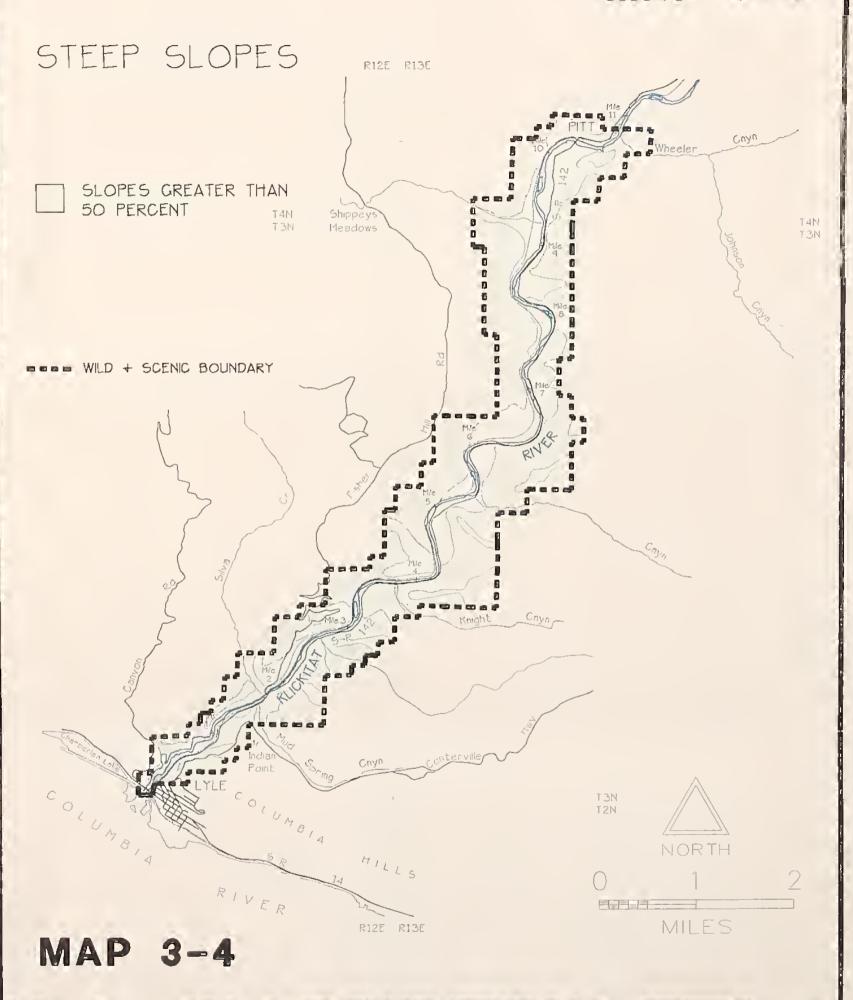
LAND USE CONTROLS

MAP 3-3

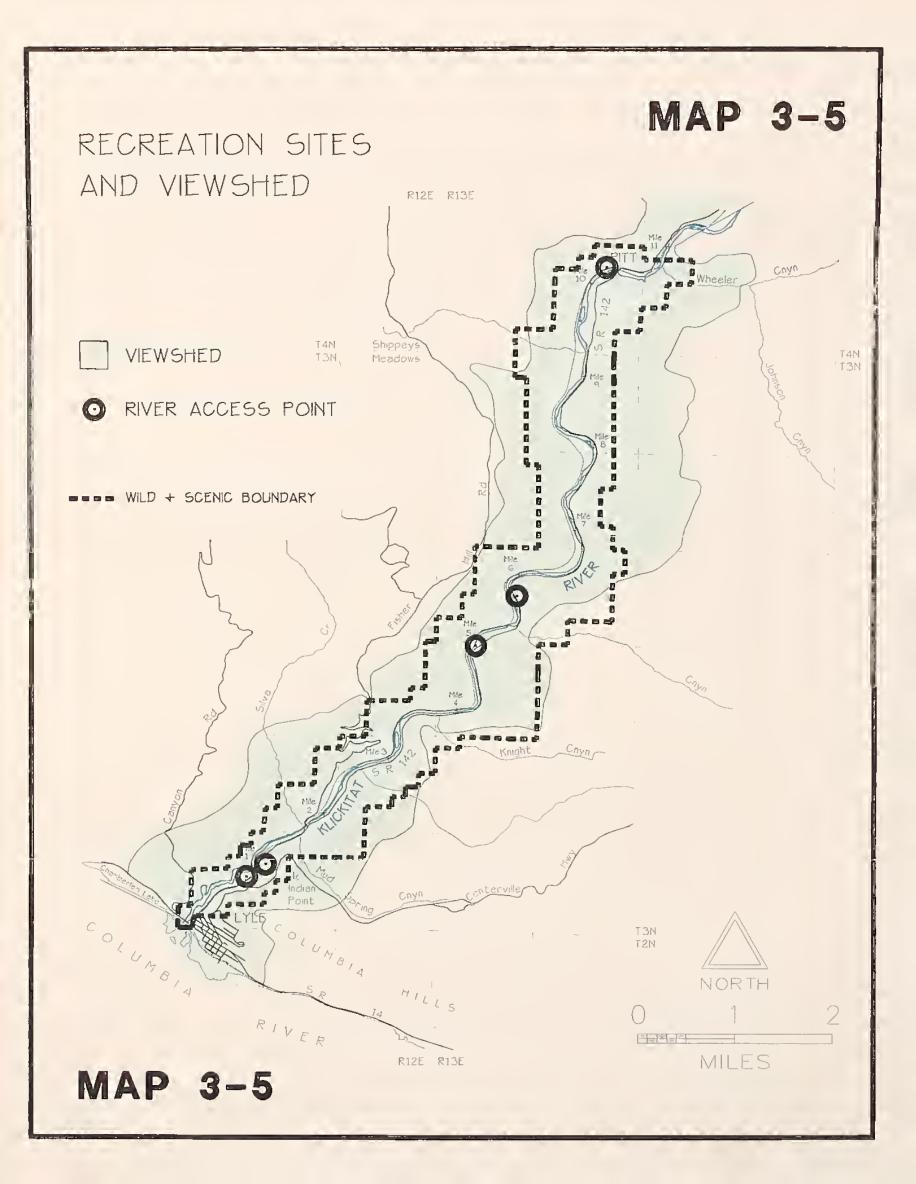




MAP 3-4



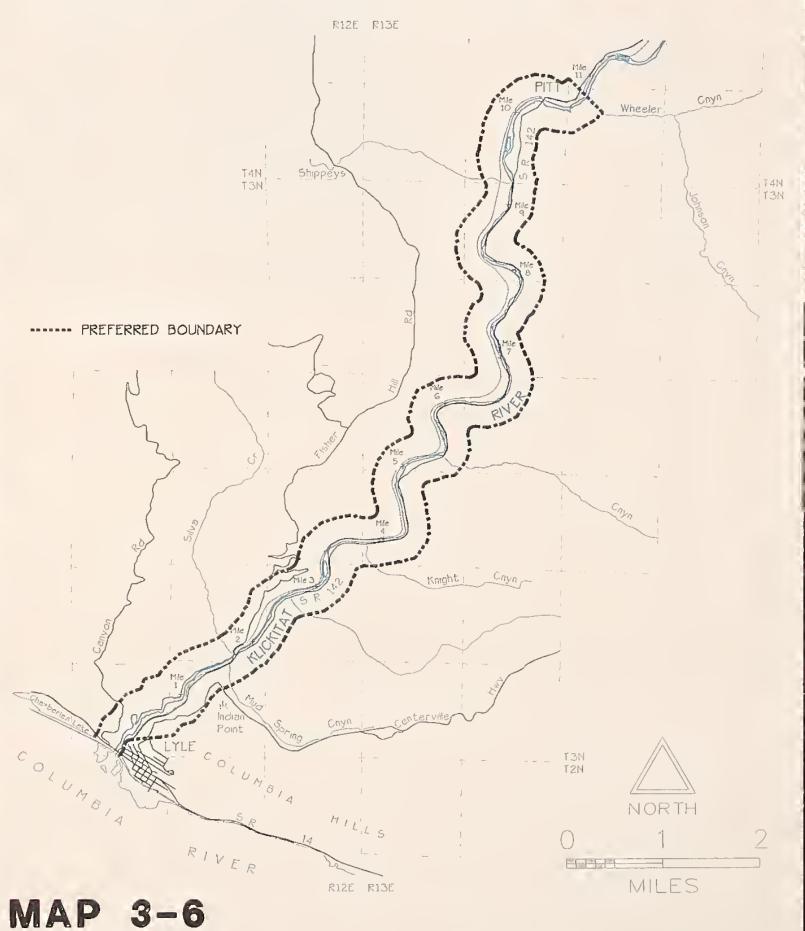


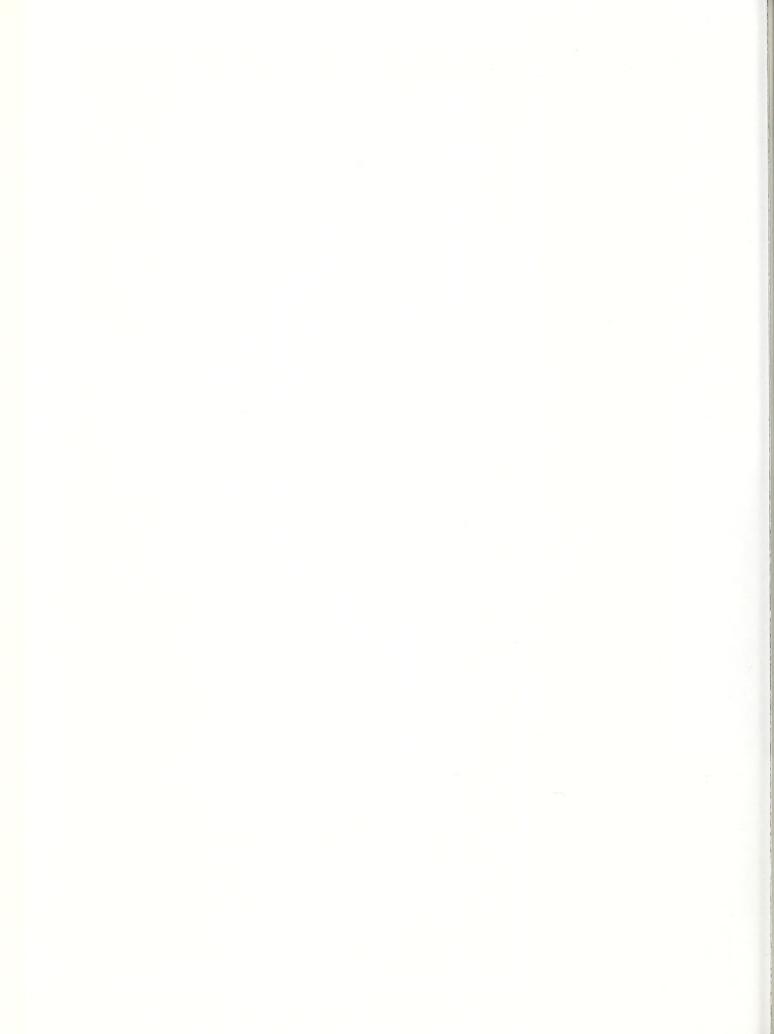




MAP 3-6

ALTERNATIVE 2 (PREFERRED) BOUNDARY







CHAPTER 4

Environmental Consequences



After spilling out of the narrowest portion of the gorge, the Klickitat flows more gently toward the Columbia (view downstream near RM 1.1).

Each of the following sections begins with a brief introduction to the type and nature of potential impacts before discussing the consequences of each alternative. Alternative 1, the current situation, describes the impacts anticipated to the resource if no additional management actions are taken. Alternatives 2, 3, and 4 describe impacts to the resource given the actions that would be taken under that alternative (as described in Chapter 2). In most cases, mitigation efforts already have been built into the alternatives and so are not listed separately.

The alternatives are organized by the same categories used to describe the affected environment in Chapter 3 except that impacts to soils are discussed under Water Quality, impacts to vegetation and wildlife are considered jointly, and impacts to Native American traditional uses are considered concurrently with archaeological resources. The order of presentation is changed slightly; impacts to land use and recreation are discussed first because these help to determine impacts to several other resource areas. Section 4.15 discusses cumulative impacts and the matrix in the Summary describes the impacts of each alternative as they relate to the seven key study issues.

4.1 Impacts to Residential Construction

Introduction. Housing is a basic human need and construction of housing can play an important role in the local economy. Residential development also can affect a wide range of physical, biological, and social resources. Some

people who wish to protect the river are concerned that increased attention to the river may heighten other trends leading to increased demand for housing. Others are concerned that management will overly restrict their ability to build or expand their dwelling.

Alternative 1: Residential construction in the river corridor has been constrained by a limited supply of suitable building sites due to steep topography, flood potential, and poor road access to the west side of the river. Under current and proposed regulations, a maximum of approximately 150 additional houses could be built in the lower Klickitat corridor. Potential building sites are dispersed throughout the corridor on private lands in the valley bottom and upslopes. While many of these sites would be considered prohibitively expensive to build on today, increasing housing demand and rising regional land values will make them increasingly attractive.

Of the 150 sites, about 35 could be concentrated on 2-acre lots in a 135-acre area around Pitt, currently zoned Rural Residential (although landowners holding most of this area intend to continue farming their property). A 20-acre area in Lyle, designated an Urban Area under the CRGNSA, is already densely developed and could not accommodate much new development. Barring variances or a change in the proposed CRGNSA plan, there would be no other new residential development within the CRGNSA boundary (except for the five-acre area referenced in Chapter 3).

Alternative 2 [preferred]: A maximum of about 85 new houses could be constructed (subject to the assumptions listed under Alternative 1). Most could be built on the upslopes and screened; some expansion of existing clusters of houses could be visible from the highway.

Future development on 60 of the 150 potential building sites described under Alternative 1 would be precluded by new county regulations prohibiting residential construction or road building on slopes steeper than 40 percent within the corridor (48 potential house sites are on slopes steeper than 40 percent and 12 others would require access across 50 percent slopes or would require new bridges over the Klickitat. Three of these 12 sites may be within the floodway and therefore not buildable anyway.)

A successful conservation easement donation program could further reduce the number of houses that would be built, as would purchasing available lots (or working with landowners to provide vegetative screening from the river and road) within the floodplain at Steelhead Run.

Alternative 3: A maximum of about 55 new houses could be constructed (subject to the assumptions listed under Alternative 1). Most could be built on the upslopes and screened; some expansion of existing clusters of houses could be visible from the highway.

^{9.} This number should be viewed as a theoretical maximum; many of these sites would be prohibitively expensive to build on unless housing demand in the immediate vicinity increases considerably. This estimate assumes that landowners would divide their lands into the minimum lot size allowed and would build as many houses as possible, that no further rezoning would take place, that agricultural exemptions (allowable housing for farm help) would not be utilized, that development would occur on steep slopes and in the 100-year floodplain (but not in the floodway), that road access to housing would be required, that access problems (such as bridging the Klickitat and building miles of road across steep slopes) would be solved, and that the CRGNSA proposed zones would be adopted.

Future development on 60 of the 150 potential building sites described under Alternative 1 would be precluded by new county regulations prohibiting residential construction or road building on slopes steeper than 40 percent within the corridor (48 potential house sites are on slopes steeper than 40 percent and 12 others would require access across steep slopes or would require new bridges over the Klickitat; three of these 12 sites may be within the floodway and therefore not buildable anyway). The county also would reduce the size of the rural residential area around Pitt, reducing housing potential by about 25 sites.

Alternative 3 requires that new structures not be substantially visible from the river, recreation sites, or Highway 142 (except in areas with existing clusters of houses). Increased county road setbacks and the expanded river buffer would likely not reduce the number of houses that could be built, but would keep houses farther away from the road and river. Scenic easements specifying housing placement would be purchased for several building sites; voluntary agreements would be sought first. Development rights or fee title would be purchased on several more potential building sites which could not be screened from view. An estimated total amount of \$134,400 - \$174,250 would be paid (fair market value) to landowners for the easements and fee title purchases.

New county regulations would require the retention of vegetation for screening on 30 potential building sites. Agreements would be sought with property owners to reduce visual impacts of existing development on five lots and to allow planting of screening vegetation on four other building sites as well as at Steelhead Run, a riverside subdivision of small lots at RM 10. Steelhead Run is a legal subdivision with restrictions for 800-square foot and up properties. Funding for planting would be provided so there would be little additional cost to landowners.

Alternative 4: A maximum of about 35 new houses could be constructed (subject to the same assumptions). Development generally would be dispersed throughout the corridor, as in Alternative 3, but existing clusters of houses would not be expanded.

The county would restrict development on steep slopes, as in Alternative 3. Development rights or fee title would be purchased on about 20 potential building sites, plus on the 135-acre area near Pitt zoned Rural Residential. Easements or land in fee title would be purchased to preclude recreational vehicles from Steelhead Run. Scenic easements would be purchased on about half of the 30 sites on which the county would have required vegetative retention in Alternative 3 (this assumes the other half would be voluntarily screened by home builders). Agreements, easements or fee title would be sought to reduce visual impacts of existing development at several sites within the corridor.

4.2 Impacts to Timber Harvest Activities

Introduction. Any impacts to timber harvest could have effects not just locally, but could contribute to cumulative impacts to logging, a highly sensitive issue in the Pacific Northwest.

Alternative 1: Nearly all of the 2,500 forested acres in the lower Klickitat corridor consists of rugged, poorly-accessed terrain and tree species (oak) of low economic value and small diameter. A few stands of mature ponderosa pine, some of which abut the river on gentle terraces, are more commercially attractive. Several areas of large-diameter oak stands on operable terrain may support a commercial firewood harvest, and many areas would support cutting of individual oak trees for personal use (firewood). Harvest would be subject to existing Forest Practices and Shorelines Master Plan regulations described in Chapter 3.

Alternative 2 (preferred): Timber owners would be encouraged and provided with technical assistance to voluntarily design any planned cuts to reduce impacts to river values. The current use tax program would be expanded to include conservation of Oregon white oak stands as a valid use for designated open space. Government agencies would work cooperatively to develop and implement an oak conservation and management program. The county's restriction on road construction on slopes steeper than 40% may restrict some future operations. Uneven-aged management on BLM and state-owned parcels may also reduce short-term harvests on certain slopes. In combination these actions could result in somewhat lower levels of timber harvest than would be the case with Alternative 1.

Alternative 3: Conservation easements to protect visual quality would be purchased on four areas of conifer forest totalling 200 acres. Easements would require uneven-aged timber management or even-aged management where clearcut areas were small and screened from view. Yields from either of these management schemes could be lower than those from large clear cuts. Assuming an average volume of 20,000 boardfeet per acre and an allowable initial harvest of 50 percent, potential short-term (10 years) timber harvest could be reduced by about 2 mmbf. Total timber harvest in Klickitat County was about 128 million board feet in 1988 (about 55 percent of this total occurred on private lands), and 120 million board feet in 1989 (70 percent on private lands). Reductions in timber harvest would be mitigated by payments to timber owners for the easements, estimated to be about \$330,000.

Fee title or easements would be purchased on 200 acres of Oregon white oak stands (the oak conservation plan would identify parameters for selection of worthy stands). Fee title or easements also would be purchased on 50 acres to protect sensitive plant species (some of which would not contain commercially harvestable timber). An estimated total of \$105,500 - \$178,000 would be paid to landowners for these purchases.

In addition, the county would require retention of vegetation at existing and future residential sites and expand the width of the river buffer. These actions could slightly reduce timber harvests compared to Alternative 2. Restrictions on residential development may result in the retention of forest lands that might otherwise have been converted.

Alternative 4: Full timber rights would be purchased for 200 acres of conifers in order to protect visual and ecological values. This would reduce potential short-term timber harvest by about four million board feet. This would be mitigated by payments for the easements, estimated to be about \$660,000.

Fee title or easements would be purchased for as much as 400 acres of oak stands and 100 acres supporting sensitive plant species. Remaining timber rights on about 100 acres already restricted by the Shorelines Master Plan would be purchased to expand the width of the river buffer. These programs would have little effect on commercial timber harvest. An estimated total of \$192,450 - \$277,250 would be paid to landowners for these rights.

The oak conservation plan, implemented on a voluntary basis, could reduce oak harvest. Restrictions on residential development may result in the retention of forest lands that might otherwise have been converted.

4.3 Impacts to Agriculture and Grazing

Introduction. Potential impacts to agriculture and grazing are a concern because people depend on the viability of these activities, which also help to define the current character of the river corridor.

Alternative 1: Intensive agricultural practices are allowed in the corridor and non-intensive grazing is allowed in the shorelines area. Through existing Soil Conservation Service programs, landowners can benefit from assistance (technical and monetary) geared toward reducing potential grazing impacts. Assistance is dependent on the availability of SCS staff and requires a request from the landowner or producer. Grazing has not increased in the recent past and is expected to remain near current levels.

Alternative 2 (preferred): Agriculture and grazing as currently allowed would not be restricted. Additional sources of technical assistance and funding would become available. New water diversion structures usually would be prohibited, limiting new or expanded land uses requiring substantial amounts of water. The eventual setting of minimum instream flows could limit options to use additional water for expanded or new grazing or agricultural operations (The river is currently not overallocated and, if current trends continue, will not be for the foreseeable future.)

Alternative 3: Similar to Alternative 2. Federal funding would be available to fence cows away from the river Changes in grazing practices may be required to protect rare plants.

Alternative 4: Same as Alternative 3.

4.4 Impacts to Recreation Opportunities and Public Access

Introduction. Recreation opportunities are made up of the physical and biological environment (including the character of the landscape, level and type of development present, and fish and wildlife), the social environment (the amount and type of people who use the recreation setting, what activities they do, and what type of experiences they have), and the managerial environment (the level, type, and location of public access, facilities and improvements, interpretation and education efforts, and onsite and offsite regulations).

Changes in any of these characteristics could change the type of recreation that takes place in a recreation setting such as the lower Klickitat River corridor. Interpreting the significance of these changes requires sound baseline data on recreational use of the river corridor. These types of baseline data currently are not available for recreation use on the lower Klickitat. Without good data, it is difficult to judge the magnitude and significance of changes in recreation use of the river corridor, or to judge the effectiveness of management. This lack of data makes it difficult to be very specific about the effects of each alternative on some recreation opportunities. As described below, some of the alternatives are better-suited to provide this baseline information.

Alternative 1: A lack of coordinated management of the county parks and other recreation sites has resulted in considerable physical impacts to these areas. Under existing management, there are no provisions for monitoring boating use patterns, conflicts, facility and access needs, and other key characteristics of recreational use. There would be no guarantee of continued access to private lands currently used for recreation. Existing state and county management programs do not systematically monitor physical conditions of the river area used by recreationists, actual levels of river oriented recreation use, or the impacts of recreation on private land owners. Public information is limited to access signs and no visitor information or education plan is being developed.

As described in Chapter 3, the number of people camping, fishing, boating, and participating in other activities along the river is expected to increase. The lack of coordinated management means that any increases in use would be uncontrolled. Physical impacts would likely include ground disturbance, litter, bank erosion, fire rings, and related problems. The potential for a greater number of incidents of recreation-related trespass and vandalism, wildfires and traffic problems would increase. Competition and conflict between

recreationists for river access, fishing holes, campsites and use areas also could increase with use.

The river currently appears to be well below its capacity for recreational use so these problems may not become substantial in the short term. However, long-term unacceptable impacts would occur without additional management. A related problem is that data on use patterns and trends are inadequate to address specific capacity issues and would not be collected under this alternative. Without adequate use information, it is impossible to determine the relationships between use patterns and impacts or to integrate visitor preferences into future recreation management actions.

The county's search and rescue program is currently being revised but funding remains a limitation. The Forest Service is contributing to this revision but adequate long-term funds cannot be guaranteed.

New residential or commercial development could affect recreation by degrading the scenic quality and natural character of the river valley and increasing the potential for conflicts between recreation visitors and landowners.

As of July 1, 1990, people or companies are required to obtain a special use permit from the Forest Service in order to begin or continue using the river for commercial purposes. Outfitters currently operating on the river may continue, and new outfitters also can receive permits, which are being issued on a one-year basis until the management plan is implemented. Limits on the number of outfitters would not be instituted unless the recreation monitoring process showed that use needed to be regulated and other means of addressing the problem had failed. Impacts to guiding and outfitting services include increased costs (such as a fee of three percent of

adjusted gross revenues) increased recordkeeping, insurance requirements, and possible future regulations on group size and other characteristics. Outfitter benefits stemming from permitting should include long-term use of the river and provisions to keep unsafe or unscrupulous outfitters off the river.

,

Alternative 2 (preferred):

Recreation use levels could increase slightly above the level described under Alternative 1 because of limited improvements in access and facilities. The increased coordination, funding, and recreation management authority would make the county and state better able to address anticipated changes in use patterns and manage use.

Management would be designed to maintain and enhance existing recreational opportunities, rather than create new ones. There would be additional coordination of recreation management in the river corridor, increasing the likelihood that increases in use levels or other changes could be addressed before problems were evident. The Yakima Indian Nation would be represented on the Scenic River Council, increasing impacts coordination with management of the gorge section.

Use patterns and physical conditions would be monitored to let the Scenic Rivers Council know about trends in fishing (and other recreational uses) in the corridor and how those uses are affecting physical and biological resources. Federal designation and oversight would provide additional ability to manage on-water recreational use such as boating. Coordinated management also would help guarantee continued and legal access at heavily used sites on private lands through acquisition of lands or easements.

Steering recreationists toward public access sites with limited information and signing would reduce impacts to private lands, reduce incidents of trespass and help reduce the likelihood of conflicts among recreationists. Landowners continuing to have problems would have a central, coordinating authority to contact (the river ranger or local Scenic Rivers Council representatives), so they wouldn't have to assume an enforcement role. Voluntary landowner regulation of corridor activities such as timber harvest and residential construction could reduce impacts to scenery.

Search and rescue operations would continue to be conducted by the sheriff. Increased technical assistance and training for personnel would increase the viability of search and rescue operations.



State of Washington angler information sign next to railroad tracks near RM 1.1 (where a short, steep trail from Highway 142 provides access to rocky benches and trails along the river)

Commercial recreational uses such as guiding and outfitting in the river corridor would be continue to be subject to permit by the Forest Service.

Alternative 3: Recreation use levels would increase slightly above the level described under Alternative 1 because of improvements in access and facilities. Acquisition would guarantee continued access at heavily used sites outside of public lands. The increased coordination, funding, and recreation management authority would make the county, state, and Forest Service better able to address anticipated changes in use patterns and provide necessary improvements to access sites and facilities. The Yakima Indian Nation would be represented on the Management Committee, increasing the likelihood of coordination with management of the gorge area.

Recreation opportunities would be enhanced compared to Alternative 2, not by providing new opportunities, but by additional funding and better monitoring of recreation use. Funding would be available to conduct a comprehensive monitoring program to manage the social, physical, and biological impacts of recreation use, maintaining desired conditions and preventing unacceptable degradation. Management would be geared toward achieving and maintaining desired conditions, not limiting use at some arbitrary level. Use level limits are not expected to be needed in the foreseeable future; they would be implemented only if other, less restrictive measures did not meet objectives. Federal designation permits management of on-water recreational use such as boating, providing a mechanism for regulating use should it be needed.

The full-time river manager and seasonal river ranger would accomplish many of these goals by performing a wide range of tasks, including public education and assistance, landowner contact, enforcement, site maintenance, and search and rescue coordination. Experience on other rivers has shown that having an active management presence on the river is an effective management tool.

Fishing use levels could increase slightly above the baseline because of increased publicity, facility and site improvements, and guaranteed long-term access to key river sites. The monitoring program would provide information on use patterns needed to help the state set fishing regulations to protect fish populations.

This alternative could increase the number of regulations governing recreational use by private (non-commercial) boaters; currently, there are no such regulations except at developed sites. The consequence would be that people could not do whatever they wanted. Regulations would be designed to protect the environment and maintain or increase the quality of peoples' experiences. Indirect management measures such as signs and visitor education would be favored over direct regulations such as restrictions on use levels, which would be used only if indirect measures failed to achieve the desired goal.

A limited public information and education effort would help reduce physical impacts caused by recreationists and would help to reduce conflicts between recreation users. Increased signing and development of pullouts along State Highway 142 would enhance sight-seeing opportunities and traffic safety. Interpretive signing or information concerning the Native American dip-net fishery would help develop public awareness and appreciation for this resource. This would be designed in cooperation with Native Americans to avoid impacts to dip-net fishing operations.

As described under Alternative 2, directing recreationists toward public access sites would help reduce impacts to private lands and incidents of trespass. Landowners continuing to have problems would have a central, coordinating authority to contact, so they wouldn't have to assume an enforcement role. Purchase of easements or lands to minimize the impacts of activities such as timber harvest and residential construction would reduce impacts to scenery, maintaining the river's natural character and enhancing aesthetic experiences.

Search and rescue operations would continue to be conducted by the sheriff. Increased funding and technical assistance would improve search and rescue operations.

Commercial recreational uses such as guiding and outfitting in the river corridor would be subject to permit by the Forest Service and managing committee. Outfitters and guides would be subject to the same impacts as under Alternative 1.

This alternative also provides the funding and mechanisms for taking advantage of future opportunities. For example, at sometime in the future, Burlington Northern may abandon its rail operations. Federal involvement would increase the likelihood that these lands or facilities could be acquired and managed to maintain desired recreation opportunities. It is not possible at this point to say how any acquired lands should be managed, only that management would be consistent with objectives.

Alternative 4: Similar to Alternative 3 except that use levels would be expected to increase moderately because of increased access development and publicity. This use would not be allowed to degrade outstanding corridor resources such as fish or the lower gorge area. The recreation monitoring and management framework would be designed to accommodate increased use while protecting resources. Limits on use numbers would be used only a last resort and are not anticipated to be needed in the foreseeable future. Federal designation provides for management of on-water recreational use such as boating, providing a mechanism for regulating use should it be needed.

Additional recreation site expansion and facility improvements as described in Chapter 2 would enhance existing recreation opportunities. Other recreation opportunities, such as hiking, biking, camping, sight-seeing, and nature study would be expanded and enhanced through

additional public information, and, in the future, possible development of new trails to and along the river.

4.5 Impacts to Visual Resources

Introduction. Scenic quality on the lower Klickitat varies due to manmade structures and disturbances that contrast with existing riverscape, pastoral, and forest settings as seen from the roads, river, shoreline recreation areas, and houses. This level of development is reflected by the classification as a Recreation river segment (see Chapter 1). Assessment of impacts under the four management alternatives included evaluation not only for preservation of existing character but also for potential enhancement of visual quality. Therefore, management actions were analyzed for their ability to provide enhancement where visual quality problems exist, particularly within the foreground as seen from the river and roads.

Because the designated boundaries do not encompass the viewshed, any management alternative's ability to protect views would be limited. Less than 50 percent of the viewshed is within the designated boundary on the lower 1.5 miles. From RM 1.5 to 2.5, approximately 50 percent of the viewshed is within the boundary. From RM 2.5 to 6.5, approximately 75 percent of the viewshed is within the boundary. From RM 6.5 to 10.8, less than 50 percent of the viewshed is within the boundary. Scenic quality in the middleground and beyond could be impaired by residential development, particularly on horizon lines, and by large clearcuts or land conversions.

Alternative 1: Under existing regulations, visual quality of the lower Klickitat corridor will probably not change dramatically until housing demand or timber prices increase significantly. For the next few years, sporadic home construction on a few sites, most of which would be within view of the river and/or highway, would slightly increase the developed character of the corridor. Viewers on the river or highway would see two areas of clustered housing (the northern two miles of the corridor, and the area near Lyle), as well as occasional homes in between. Views of forested areas would be degraded slightly by clearing for new housing.

The lower 1.5 miles within the CRGNSA probably would receive adequate scenic protection under existing management. Under current planning, the east bank would serve as a transition zone between the river and the town of Lyle. Residential and commercial recreation development would be allowed but proposals would have to go through a design review to make sure development would be visually subordinate to its setting. The west bank would be zoned open space, where residential and commercial development would not be allowed. Active management is not planned for scenic cultural and historic features such as the Highway 14 bridge, the railroad bridges and right-of-way (ROW), the barns, and

Fisher Hill road—all important landscape components but not registered historic or archaeological sites.

The upper 8.7 miles of the river corridor could be altered considerably. In the long term, more intensive development of the corridor would likely occur, with new housing locating on unscreened side slopes as well as along the river. Many of the conifer stands along the river would be altered by timber harvest. The character of the river corridor would change from rural/natural to rural residential.

Klickitat County's zoning and shorelines management would partially protect scenic values along the river. One hundred-foot setbacks from the river and fifty-foot riparian buffers would protect shoreline aesthetic quality. Minimum lot size varies from 20 acres to 6,000 square feet. No architecture or design review regulations currently exist; concerns are with building safety, not aesthetics. If all lots on the lower river were built upon, the visual impacts would significantly mar existing scenic values for river visitors.

No system exists to address the increasing numbers of recreation visitors, which eventually could reduce opportunities for solitude, wildlife observation, and other activities, as well as disrupting sensitive natural landscapes.

Alternative 2 (preferred): Short-term impacts to visual quality would be much the same as under Alternative 1, but new housing would be less obtrusive. In the long term, while there would be fewer views dominated by housing, one's overall impression would be similar to Alternative 1 — that of a rural corridor with clusters of houses on the lower slope benches and upslope areas that remain undeveloped due to county prohibition of road construction on steep slopes.

State Scenic Rivers designation would serve to place greater agency and public emphasis on the management of the scenic resources along the lower Klickitat River. The Washington Department of State Parks would coordinate federal, state and local agency actions, priorities and management within the boundaries. The State Scenic Rivers program would involve residents and users in developing a management plan which would help meet the scenic needs of property owners as well as visitors. A new coordinated effort may result in voluntary scenic resource protection programs within the viewsheds.

Voluntary river cleanup programs would be implemented. Through state designation, the lower Klickitat River would gain higher state funding and management priorities for water quality monitoring and enforcement, wildlife and fishing habitat improvements, and recreation management, all of which would serve scenic resources.

Alternative 3: The general visual character of the corridor would be maintained. A few new houses would likely be visible from road and river in the next few years; over time, a slight expansion of existing housing clusters would be evident, while glimpses of structures through the trees would

be more common. The nature and extent of forested views would remain largely intact, and the appearance of some existing structures could be improved.

Significant scenic resource benefits of Alternative 3's management include a greater focus on scenic resource protection, with federal authority and funding for in-fee title and easement acquisitions.

Conservation easements would be used to meet visual objectives on the most commercially attractive forest lands, reducing the potential impacts of timber harvest. The purchase of development rights or easements from existing property owners would reduce the visual impacts of potential residential development in visually sensitive areas, while allowing development to occur on less sensitive sites outside the viewshed. The oak conservation program described under upland resources would aid scenic protection.

Public access and recreational facilities would be improved and visitor impacts actively managed, providing enhanced viewing opportunities while reducing the visual impacts of recreational use

Alternative 4: The character of the corridor would be maintained and in some instances enhanced. Fewer new houses would be noticeable from river and road than under Alternative 3. The nature and extent of forested views would be preserved, and the appearance of some existing structures would be improved.

Impacts would be similar to those under Alternative 3, but with additional visual resource enhancement and opportunities for public viewing. The management actions described in Chapter 2 would result in superior scenic resource protection within the designated boundaries.

4.6 Impacts to Native American Traditional Uses and Archaeological and Historical Resources

Introduction. The Native American dip-net fishery in the Klickitat River gorge is a unique cultural resource. For Native Americans, the fishery provides a source of sustenance as well as a link to a long tradition. For others living in the area, and indeed for all citizens, the fishery is a cultural resource of major educational and historical significance. People concerned with the river appear united in their desire to perpetuate traditional uses and protect cultural resources in the river corridor.

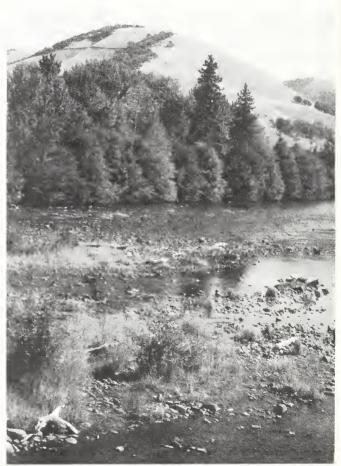
The Klickitat River's dip-net fishery has been found to be an Outstanding resource (see Chapter 3). One of the principal aims of a management plan for a Wild and Scenic river is protection and enhancement of Outstanding resources. The effects of each alternative on the dip-net fishery is therefore a

major consideration in the evaluation of environmental consequences.

Alternative 1: To date there has been little conflict between protection of cultural resources and other uses of the river and its shorelands. Native American access to the river for hunting, fishing, or other uses currently is not an issue. Native American trust lands and public lands will continue to provide Native Americans with access to the gorge and the river's mouth. Access to these and other areas for fishing is guaranteed by treaty and subsequent court decisions. Access by Native Americans to areas traditionally used for religious purposes also is only guaranteed on federal and trust lands.

Trust lands near the gorge are owned by individual members of the Tribe. While it is theoretically possible that these lands could be sold or developed, the restrictions placed on sale or development of trust lands along the gorge virtually assure that these lands will remain in Native American ownership and that they will continue to be used by Tribal members for the traditional purposes of fishing, camping, and gatherings.

Archaeological and historical resources would be managed and protected according to existing federal and state law. State laws prohibit disturbance to Indian burial sites and restrict disturbance of archaeological sites. Review would be required



Riparian vegetation near RM 8.

on a case-by-case basis for any federal or state project or a project requiring federal or state permits.

No surveys would be conducted except in response to development projects and as required by law. The overall knowledge of river related cultural resources would remain limited, so no actions could be implemented to protect yet unknown resources. Some areas along the river, notably the gorge, are protected from impacts to cultural resources by virtue of steep terrain and Native American and state ownership. Other areas with cultural resource significance, including the area near the mouth, are considerably more vulnerable. Lacking a survey of the Klickitat village site, it is difficult to predict its vulnerability.

Recreational use of the river is predicted to increase. Expanded use could increase the potential for harm to any cultural resources which might be in the area, although the lack of above-ground evidence of sites prohibits willful vandalism. Increased use of the gorge area by sport anglers or boaters could conflict with Native American traditional uses.

Alternative 2 (preferred): Opportunities for Native Americans to practice traditional dip-net fishing and to use the gorge area for gatherings would be enhanced compared to Alternative 1 due to development and implementation of a site plan for the gorge. Recreation management would be designed to avoid conflicts with or other impacts to the gorge area and dip-net fishing. Improved safety measures would decrease the risk of accidents for Native American fishermen. Important cultural sites would be identified and protected. Otherwise, traditional use opportunities would be the same as those in Alternative1.

Alternative 3: Impacts to the dip-net fishery would be similar to Alternative 2. Protection of archaeological and historical resources would be strengthened considerably. An archival inventory of cultural sites would be conducted, as well as on-the-ground surveys of public lands and, with permission, private lands. The knowledge gained would help to focus attention on the resources in need of protection. Site plans would be developed for high priority sites, which could be acquired if necessary for protection sometime in the future. Consultation with the Yakima Indian Nation would help to ensure that sites of significance to Native Americans would be identified and protected. Site plans would be developed for high priority sites including the gorge, and sensitive sites would be closely monitored to ensure they were being protected. Increased local zoning controls also would promote protection of cultural resources found in the immediate river vicinity. Recreation management actions would help to lessen the potential for impact to cultural resources.

Alternative 4: Effects on Native American traditional uses would be the same as with Alternative 3 except for the possibility of increased conflict between these uses and use by boaters, anglers, or sightseers. These conflicts would likely be mitigated through recreation management actions

undertaken with the assistance of the Yakima Indian Nation and local Native Americans. Recreation management would be designed to avoid conflicts with or other impacts to the gorge area and dip-net fishing.

Known archaeological and historic resources would be afforded the same protection as under Alternative 3. Additional protection would result from more-detailed site inventory and added protection measures. Consultation with the Yakima Indian Nation would help to ensure that sites of significance to Native Americans would be identified and protected. All eligible sites would be recommended for registration as national or state historic places. This would guarantee that the state Historic Preservation Office and the National Park Service have input into development that could harm significant sites. These sites also would be given priority for federal acquisition, which would be more extensive than under Alternative 3.

This alternative includes improvements to recreational facilities, potentially increasing impacts to cultural resources. The knowledge gained on cultural resources through inventory would be used to help design recreational facilities that would not adversely effect cultural resources. Interpretation of dipnet fishing practices would increase public appreciation for this valuable resource and would be designed to avoid impacts to dip-net fishing. Interpretation, in fact, could reduce impacts below that of the other alternatives because people would gain sensitivity to the dip-net process and would be encouraged to view the gorge from a designated location chosen to avoid conflicts.

4.7 Impacts to Geological Resources

Introduction. With its strategic location near the river's mouth, the sharply incised gorge is the first impression that most people get of the Klickitat River. Here the entire volume of the state's second longest river is constricted through a passage that in some locations is only eight feet wide. The combination of exploding rapids and sheer rock walls produce a memorable visual experience, an experience that is enhanced by the recognition that this gorge is one of the few remaining locations where Native American fishermen practice traditional methods to catch returning salmon.

Due to its significant geologic qualities the Klickitat gorge has been found to be an Outstanding resource (see Chapter 3). The effects of each alternative on the gorge is therefore a major consideration in the evaluation of environmental consequences.

Alternative 1: The majority of the land abutting the gorge is owned by the Washington Department of Fisheries. The state's interest in this land is the anadromous fishery and, more specifically, the fish passage facility near the upstream end of the gorge. With the exception of proposed improvements to the fish passage facility, the Department foresees no changes

within the gorge or on state lands along the gorge. On the west side of the river state holdings are narrow and are abutted by Indian trust lands. There are no plans to develop these lands; development would be contrary to Yakima Indian Nation policy. The only private land abutting the gorge is on the east side near the town of Lyle (see map 3-1). The county's Shorelines Management Plan requires a 100' setback from the water's edge for building on this land.

Potential for development within the gorge walls is restricted due to physical constraints. The only anticipated development is reconstruction of Native American fishing platforms. There is some debris in the gorge associated with abandoned fishing platforms. Any alterations to the gorge would require a hydraulic project approval from the Washington Department of Fisheries. It is unlikely that such a permit would be granted due to the state's vested interest in maintaining the anadromous fishery in the gorge.

If a new bridge were constructed, it would affect the visual character of the gorge. Physical impacts could be minor because any new bridge would likely be anchored well outside of the gorge rim. An existing bridge serves as access to the fish passage facility and the Native American fishing areas. There are no current plans to build additional bridges; it is unlikely that an additional bridge would serve a purpose that cannot be met by the existing bridge.

Alternative 2 (preferred): Impacts would be similar to those under Alternative 1 except that new bridges would be specifically excluded and a site plan for the dip-net fishing area could result in removal of debris including abandoned fishing platforms. The risk of impacts would be reduced further by the potential to purchase sites that could be affected by proposed development.

Alternative 3: Impacts would be the same as under Alternative 2.

Alternative 4: Impacts would be similar to those of Alternative 2 except that additional federal money would be available to purchase and preserve lands near the gorge.

4.8 Impacts to Streamflow and Water Quality

Introduction. As the size of the regional population increases, so does the potential for stream side development, water withdrawals to provide drinking water, and septic runoff, potentially resulting in reduced river flows and decreased water quality. Additional agricultural use of the region could increase turbidity and fecal coliform levels in the river due to increased grazing in the riparian zone. Irrigation withdrawals could further decrease flows, and runoff from farmlands could increase concentrations of salts, heavy metals, and turbidity in the river.

Logging, road construction, agriculture, grazing, and development of residences and recreation sites could increase rates of erosion and sediment transport by disrupting soil and vegetation. Removal of soil protection and the water-retention capabilities of vegetation, accompanied by ground disturbance and compaction, exposes soil to erosional forces that carry sediment to the river. Water withdrawals and loss of stream side overhanging vegetation also tend to increase water temperatures. Logging in the upper watershed also could contribute to the sediment loads in the river, although following state best management practices would reduce the risk of adverse effects.

The Klickitat River's free flowing character has been found to be Outstanding resources (see Chapter 3). The effects of each alternative on the river's free flowing character is therefore a major consideration in the evaluation of environmental consequences.

Alternative 1: Under existing management, the Shorelines Master Plan (with proposed revisions) restricts development and timber harvest. Vegetation is largely protected along the streambed on state lands, which constitute approximately 25 percent of the riparian lands in the river corridor. Grazing in the shorelines area is not prohibited but is not intensive and is not likely to increase significantly. Water quality in the river is likely to be most affected by logging and other activities upstream from the study segment and along tributaries to the river. Current logging practices throughout the 1,350 square mile watershed use required erosion and sedimentation control measures that reduce sediment loads to the river.

Limits placed on logging in the river corridor—which comprises less than one percent of the watershed area—would result in only a minor reduction in the sedimentation rate. Residential construction could increase substantially, which could result in an increase in erosion and sedimentation. The degree of sedimentation increase will be directly related to the degree of disturbance of existing vegetation, the rate of revegetation, and erosion controls employed during construction.

The Klickitat River Subbasin Salmon and Steelhead Production Plan includes recommendations for watershed-wide programs and practices that would help to control activities which could affect water quality and quantity in the Klickitat River. Implementation of the Subbasin Plan, expected in 1991, will further enhance water quality.

The state has not established minimum instream flows for the Klickitat, and there is little data to help suggest what those flows should be. Overallocation or low flows due to water withdrawals currently is not a problem in the mainstem, and the potential for future withdrawal is limited. Most of the Klickitat's headwaters and the upper river are part of the Yakima Indian Reservation or the state's Klickitat Wildlife Area, limiting the potential for future upstream withdrawals

that could dewater the lower river, especially given commitment to restoration of the anadromous fishery. There is potential that future diversions from tributaries could reduce flows in the lower river. The lack of a systematic water quality or quantity monitoring program hampers efforts to adequately manage stream conditions.

The river's free flowing character will not be altered due to the Wild and Scenic Rivers Act's prohibitions on new dams and similar prohibitions under the Northwest Power Planning Council's protected areas program.

Alternative 2 (preferred): Monitoring of water quality and flows would provide information needed to establish firmer objectives and to measure progress toward attaining them. Public education on protection of water quality would be expanded and voluntary controls of water quality impacts encouraged, which could result in reduced risk of impacts to water quality as the regional population increases.

Reductions in timber harvest and residential construction from road construction restrictions and voluntary and other measures could result in very minor reductions in the risk of sedimentation. Establishing minimum instream flows would further reduce potential impacts. Limited federal financial assistance would be available for shoreline projects, such as fencing and riparian restoration, that could result in slight water quality improvements.

The effect of this alternative on the river's free flowing character would be the same as that of Alternative 1. If anything, protection would be stronger due to the Washington Scenic Rivers Act's prohibition on new dams.

Alternative 3: Restricting road construction and timber harvest, maintaining a buffer zone of undisturbed vegetation, and limiting residential construction would slightly reduce the potential for erosion and sedimentation. Limited federal financial assistance would be available for shoreline projects, such as fencing, that could result in slight decreases in sedimentation. Federal funding would also be available for water quality and quantity monitoring, providing a means to identify any problems that might arise. Although there are no reasonably foreseeable plans to increase water diversions substantially, federal funding could be available in the future to purchase water for instream flows if the need arises.

The effect of this alternative on the river's free flowing character will be the same as that of Alternative 1.

Alternative 4: Same as Alternative 3 except that additional restrictions on timber harvest and residential construction would further reduce the risk of erosion and sedimentation by reducing the area along the river which could be cleared. The effect of this alternative on the river's free flowing character will be the same as that of Alternative 1.

4.9 Impacts to Anadromous and Resident Fish and **Fisheries**

Introduction. Through both legislation and court decisions, state and federal agencies have been directed to initiate actions to protect and enhance the Columbia Basin's anadromous fish resources. In addition, the Northwest Power Planning and Conservation Act authorized the development of a plan to "protect, enhance, and mitigate" Columbia Basin anadromous fish. As a result of these directives, agencies and Tribes are jointly preparing a Columbia Basin Systems Plan and a series of sub-basin plans, including one for the Klickitat

The Plan, scheduled to be implemented on the Klickitat beginning in 1991, is an intensive salmon and steelhead enhancement plan which is expected to considerably enhance the Klickitat River's fish resources. It will include a new hatchery, habitat protection measures, and possibly increased passage over problematic areas. Given that this plan is certain to be implemented, the provisions of the plan are being considered as a component of current management (Alternative 1). Because this plan provides such extensive fish enhancement and protection and has been endorsed by affected agencies, development of different scenarios for Alternatives 2, 3, and 4 would be redundant and possibly counterproductive. The assumption is being made that efforts to improve habitat for anadromous fish will have similar effects on resident fish.

The Klickitat River's anadromous and resident fisheries have both been found to be Outstanding resources (see Chapter 3). The effects of each alternative on anadromous and resident fish is therefore a major consideration in the evaluation of environmental consequences.

Alternative 1: Implementation of the Sub-basin Plan will provide extensive protection and enhancement.

Alternative 2 (preferred): Similar to Alternative 1 except fish would benefit from the reduced risks to water quality and quantity discussed under Alternative 2 in Section 4.8.

Alternative 3: Similar to Alternative 1 except fish would benefit from the reduced risks to water quality and quantity discussed under Alternative 3 in Section 4.8.

Alternative 4: Similar to Alternative 1 except fish would benefit from the reduced risks to water quality and quantity discussed under Alternative 4 in Section 4.8.

4.10 Impacts to Vegetation and Wildlife

Introduction. Impacts to vegetation and wildlife from each of the four proposed management alternatives depend primarily on the effects these alternatives have on recreation and land use along the lower Klickitat. Each alternative also would provide different programs and levels of funding to identify and preserve wildlife habitat, rare plants, and significant plant communities.

Increased recreational use of an area, residential construction, logging, or overgrazing can alter the extent, structure and composition of riparian and upland vegetation, potentially decreasing local populations of wildlife and sensitive plant species. The resulting changes in wildlife distribution and habitat use can be temporary or long-term. Increased recreational use also can increase the risk of wildfires.

Initially, the resource inventories proposed under Alternatives 2, 3, and 4 would provide baseline data on sensitive, threatened, and endangered plants and wildlife. In later years, these alternatives would provide funds for monitoring any populations identified in the baseline surveys.

Alternative 1: About 67 percent of lands in the corridor are privately owned and therefore provide little protection for vegetation and wildlife resources. Reconnaissance-level data exist for rare plants, significant plant communities, and wintering bald eagles. Land uses within 200 feet of the river are restricted under the Shorelines Master Plan. Continuation of current levels of protection is expected to result in moderate impacts to wildlife.

Increases in recreational use of the lower Klickitat River are expected. Impacts to vegetation and wildlife from recreational disturbance are potentially the greatest for this alternative because it offers the least control over recreation. Increased boating, fishing, hunting, and hiking would result in camping, lunch stops, and access at informal, undeveloped sites along the river that could result in disturbance to riparian habitat, wildlife, and rare plants.

Under current and proposed regulations, 150 new houses could be constructed on private lands within the corridor. Development could remove trees that are used by wintering bald eagles. Because bald eagles are particularly sensitive to disturbance while foraging (Stalmaster, 1987), development that results in greater human use could change this species' distribution and use of the lower Klickitat. However, perch trees are probably not limiting along the Klickitat and greater human use would only be expected during the summer when eagles are not present. Consequently, the impacts of development on eagles is not expected to be significant.

Logging of conifer stands and of oak that may be cut for firewood would decrease the amount of habitat available to species, such as the gray squirrel, that depend on upland forests. These species could experience temporary decreases in population or changes in distribution and habitat use. Logging also could destroy individuals of any rare plants that occur in upland forest habitats.

Impacts of grazing to vegetation and wildlife are expected to be minor. About six ranchers graze about 400 to 500 head of cattle on both sides of the river primarily in the spring. Grazing is allowed by current and proposed county regulations as long as damage to shoreline areas does not occur. The Soil Conservation Service (SCS) will be working with ranchers to develop grazing plans to minimize overgrazing effects. Overgrazing is currently not a problem along most of the lower Klickitat River (except in localized riparian areas) and the SCS plans should minimize its effects on habitat in the future.

Alternative 2 (preferred): Funding would be available to conduct more-detailed studies to identify and develop plans for rare plants and significant plant communities. Land owners would be encouraged to conserve these resources. Access also could be restricted at sensitive locations on state lands, and acquisition could be used as a last resort to preserve threatened resources. Impacts to important wildlife habitat and rare plants would likely be lower than under Alternative

The increase in recreational use of the lower Klickitat is expected to be slightly greater than the level described for Alternative 1. However, the increase in management authority and coordination between the state, county, and Yakima Indian Nation provided would result in better control of recreational use, particularly boating and fishing, than currently exists. The identification and enhancement of specific public access sites would help control degradation of riparian habitat and disturbance to wildlife and populations of rare plants. Consequently, impacts to wildlife and vegetation from recreational disturbance are expected to be less than those anticipated with Alternative 1.

Residential development would be less than Alternative 1, particularly in the upslope area. Significant wildlife and plant habitats would be identified and land owners would be encouraged, through donation of conservation easements and other voluntary measures, to conserve these resources. Exceptionally valuable resources that cannot be adequately protected by existing regulation or agreement may be purchased from willing sellers in fee or easement. Therefore, impacts to wildlife and vegetation from development would be slightly less than under Alternative 1.

Landowners would be encouraged to conserve significant plant and wildlife habitats and to voluntarily design planned timber cuts to reduce impacts to river values. Also, agencies would work to develop an oak conservation plan. If successful, these programs could result in lower harvest levels of timber harvest. Consequently, impacts to wildlife and vege-tation due to logging could be less than under Alternative 1.

Current grazing practices would continue but more funding and assistance would be available for landowners to construct fences make shoreline improvements, and otherwise conserve significant wildlife and plant habitats. Consequently, impacts of grazing to wildlife and vegetation would be slightly less than under Alternative 1.

Alternative 3: Funding would be available to conduct more-detailed studies to identify important wildlife habitat, rare plants and significant plant communities and develop site-specific management plans. Landowners would be encouraged to conserve these resources and a limited amount of easements or land would be purchased to protect significant wildlife habitat and plant communities and maintain biodiversity.

The increase in recreational use of the lower Klickitat River is expected to be slightly greater than the levels described for Alternatives 1 and 2 because of limited improvements in access. Increased recreation management efforts and monitoring would control this use to limit impacts to vegetation and wildlife. Public access sites and improvements would be located in areas that cause the least amount of disturbance to riparian habitat, wildlife and populations of rare plants. Consequently, impacts to wildlife and vegetation from recreational disturbance are expected to be less than those anticipated under Alternatives 1 and 2.

Potential residential development would be about 40 percent of the amount permitted under Alternatives 1 and 2. Consequently, impacts of residential development to wildlife and vegetation are expected to be less than under Alternatives 1 and 2.

Conservation easements would be purchased on four areas of conifer forest totalling 200 acres. Easements or lands in fee title would be purchased for 200 acres of oak to conserve that species, and for 50 acres to protect sensitive plants. The county would expand the river buffer protected under the SMP to include an additional 100 acres. The oak conservation plan would encourage actions on public and private lands to conserve this resource. Consequently, potential impacts to state rare plants, oak communities, and habitat lost due to logging or development would be less than Alternatives 1 and 2. In some cases, selective cutting may improve forage habitat for deer by opening the forest canopy, resulting in the growth of understory shrubs, grasses, and forbs.

Grazing along the lower Klickitat would be the same as under Alternative 2, resulting in the continuation of current impacts on riparian habitat but with some shoreline improvements and voluntary conservation of significant plant and wildlife resources. In addition, federal funding would be available to fence cows away from the river and away from areas containing sensitive plants.

Alternative 4: As in Alternative 3, federal funding would be available to conduct more-detailed studies to identify important wildlife habitat, rare plants, and significant plant

communities. Land owners would be encouraged to conserve these resources but extensive amounts of easements and land would be purchased to protect vegetation and wildlife and maintain biodiversity.

The increase in recreational use of the lower Klickitat River is expected to be greater than the levels described for Alternatives 1, 2, and 3 because of increased access and publicity about recreational opportunities. However, the management authority, coordination, and funding program established as part of Alternative 3, including increased monitoring and planning, would help to protect significant wildlife habitat and plant communities. Consequently, impacts to wildlife and vegetation from recreational disturbance are expected to be similar to those anticipated under Alternative 3.

The goal of Alternative 4 is resource enhancement. Lands in fee title and scenic easements would be purchased for many of the potential housing sites. Only about 30 new houses would be possible, plus a few in Lyle. Development would generally be dispersed. Consequently, there would be less impact to wildlife and vegetation from development under than under any of the other alternatives.

Full timber rights or fee title would be purchased for 200 acres of conifer and conservation easements or lands in fee title would be purchased for 400 acres of oak stands and 100 acres containing sensitive plant species. The river buffer would be expanded and the oak plan would be implemented as under Alternative 3. Consequently, potential impacts to state rare plants, oak communities, and habitat lost due to logging would be less than under Alternatives 1, 2, and 3.

Grazing along the lower Klickitat river would be the same as under Alternative 3, resulting in similar impacts.

4.11 Impacts to Socioeconomics

Introduction. Several concerns have been raised by area residents, including the effects of increased population levels and more development, increased recreational activity and resulting greater conflicts between recreationists and property owners, increased assessed property values and taxes, reduced property tax receipts to the county, deterioration of some public services and infrastructure, and possible loss of the rural character of the river canyon.

The river management planning process itself has created impacts in local communities and in the region; people are polarized over the issues and have diverse views on how the lower Klickitat should be managed now that it is a Wild and Scenic River. Regardless of the alternative eventually adopted, some factions are apt to be frustrated and resentful.

Alternatives 1: The 150 additional houses that could be constructed (see Chapter 3) could result in an increase of 391 people over current population levels, using the 1980 Washington State average of 2.61 people/household. These

figures represent the maximum potential development; they are most likely to result from increases in the number of retirement homes and second homes for recreational use. Converting this land from forestry and agricultural uses to residences would affect individual property owners, as described below, but should have no noticeable effect on the overall economy of the county.

The 150 units built on private land could generate \$131,850 in new property taxes annually. This estimate is highly speculative because: (1) all potential units are not likely to be built; (2) it does not take into account added costs to the county for services; (3) it assumes prices have only increased at the rate of inflation when recreational pressures have caused sharp increases in some housing values; and (4) it is based upon the median housing value as well as an average tax rate.

This river reach has not experienced the in-migration of new people that has occurred in the White Salmon River valley, although such growth may eventually occur. The maximum potential increase of 150 housing units is likely to occur slowly and would result in a slow integration of in-migrants into the local social structure. Therefore, only limited impacts to the local social value system are likely to occur from in-migration under any of the alternatives. However, a faster rate of in-migration, coupled with differences in lifestyle between newcomers and locals, could create social conflicts within the local population.

In addition to a potential increase in the number of houses, existing land and housing units might increase significantly in value as the increased demand for housing being felt in the Columbia River Gorge area disperses into the Klickitat River valley. This process has begun somewhat with an estimated 30 percent increase in value for land and improvements occurring during the past four years around Lyle (Shipp, 1989). Increased values would affect landowners by increasing property taxes, but would provide needed tax revenues to the county. Alternative 2 would mitigate the negative effects of increases in land values attributable to river management by providing residents along the river with the opportunity to decrease their property taxes by donating conservation easements.

Increases in recreational activity and associated slight growth in recreation-oriented business could increase the viability of

10. To assess the potential county property tax revenues that might be generated from the addition of the above new housing units, the 1980 median housing value of \$39,500 for Klickitat County was used as a baseline number. This figure was inflated to 1988 dollars, using average U.S. City Consumer Price Index inflators (43.57 percent), to obtain a median housing value of \$56,700. Assuming that the property would be assessed county property taxes at \$15.50/\$1,000 assessed value (the area average of the \$14.00 to \$17.00 assessed per \$1,000 of value), about \$879 in property taxes would be paid annually on each unit.

enterprises (such as bed and breakfasts and commercial fishing and floating) that currently operate on a marginal basis, as well as attract new tourism-related businesses. Increased activity also might result in some increases in related employment. As a result, some new sales tax revenues would be generated by increased recreational activity and purchasing in the area. No overall increases in income levels are likely to result from these alternatives.

Increased recreational activity and in-migration will put further stress on emergency, law enforcement, and road maintenance services. One county sheriff currently services the western portion of the county, and search and rescue services are provided by a combination of paid and volunteer staff. Any additional stress on these limited services could be significant.

Alternative 2: The maximum of 85 new houses constructed under this alternative would result in an estimated increase of 221 people and generate an estimated \$74,715 annually in tax revenues, using the same methods described above. Timberlands within the corridor are mostly non-commercial, and very little logging has occurred to date. Reductions in timber harvesting would result in negligible effects on the local economy.

Funding and technical assistance for search and rescue operations would help to mitigate the effects of increased recreational use.

Alternative 3: The maximum of 55 new housing units constructed under this alternative would result in an estimated increase of 143 people and generate an estimated \$48,350 annually in tax revenues, using the same methods described above. Timberlands within the corridor are mostly noncommercial, and very little logging has occurred to date. Restrictions on timber harvesting would result in negligible effects on the local economy.

Any increases in land values attributable to river management would be mitigated for residents along the river by payments for conservation easements and/or decreased property tax payments because of donating easements. A estimated total of \$744,250 would be paid to corridor landowners for acquisition of easements or lands in fee title, although this would benefit only people whose lands contained the resources to be protected. Easement donation also could result in lower assessed property values. The reduction in available housing sites would reduce the potential for in-migration and the risk of social conflict. Funding and technical assistance for search and rescue operations would help to mitigate the effects of increased recreational use.

Alternative 4: Similar to Alternative 3 except the maximum of about 35 new houses could increase the population in the river corridor by a maximum of about 91 people and tax revenues by \$30,760 per year. As was the case under Alternative 3, only slight effects on the timber industry should result from this alternative. Payments to landowners

for easements and lands acquired in fee title would be greater than under Alternative 3 because of increased resource protection measures, totalling an estimated \$2,124,000. The substantial reduction in available housing sites would reduce the potential for in-migration and resulting social conflict. Funding and technical assistance for search and rescue operations would help to mitigate the effects of increased recreational use.

4.12 Impacts of the Alternatives on Key Study Issues

The table in the Summary describes how each alternative addresses each of the seven key suitability issues. As required by regulations implementing NEPA (40 CFR Parts 1500-1508 as of July 1, 1986), the table presents the environmental impacts of the alternatives in comparative form, providing a clear basis for choice among options by the decisionmaker and the public.

4.13 Adverse Environmental Effects That Cannot Be Avoided

None of the alternatives contains management directions that would directly create unavoidable adverse environmental effects. It is conceivable that the lack of additional actions under Alternative 1 could lead to adverse effects on river corridor resources at some time in the future, but this would depend on the nature of the threat and the ability of existing resource protection mechanisms to address it. For example, construction of the maximum number of possible houses in the river corridor would foreclose some resource protection options as as well as increase the potential for water pollution and impacts to vegetation and wildlife. Increased conflicts between landowners and recreation visitors also could result.

4.14 Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

All of the alternatives would preclude hydropower development and other water projects that could adversely affect river values. However, this prohibition stems from the act designating the lower Klickitat as a National Wild and Scenic River, not from the management actions under any alternative. None of the alternatives contain specific actions that require a substantial loss of short-term use in order to achieve long-term protection. Under Alternative 1, the reasonably foreseeable short-term uses would be unlikely to affect long-term productivity.

4.15 Irreversible and Irretrievable Commitments of Resources

Because the alternatives deal with conservation of corridor resources rather than resource development activities, no alternative calls for any irreversible or irretrievable commitments of resources. The absence of action under Alternative I could lead to impacts mentioned in Section 4.12, which could be irreversible depending on the nature of the threat.

4.16 Cumulative Impacts

Regulations implemeting NEPA define cumulative impacts as:

The impact on the environment which results from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

For this project, the issue is whether any of the management plan directions contain measures which could contribute to cumulative impacts, which could be either adverse or beneficial. Following is a discussion of the most likely cumulative impacts that are relevant to the key study issues.

- 1. The beneficial impacts to fish habitat (resulting from the decreased risk of water pollution and withdrawal) under Alternatives 3 and 4 would add incrementally to the beneficial impacts of sub-basin planning. Enhancement of anadromous fish populations and habitat will continue to be a priority in the Columbia River system and Pacific Northwest for the reasonably foreseeable future.
- 2. The reduced timber harvest possible in the river corridor under Alternatives 3 and 4, although slight relative to the amount and quality of timber harvested in the county, would contribute incrementally to reasonably foreseeable reductions in timber harvest resulting from protection of northern spotted owl habitat and other limitations on harvest. Although spotted owl habitat does not exist in the lower Klickitat River corridor, any impacts to timber harvest and the potential for loss of income or jobs should be considered in a broader context.
- 3. The increased regulation of management practices on private lands in the river corridor that would accompany Alternative 3 would contribute incrementally to what many local residents perceive as a loss of private property rights. Other sources of impact include the The Columbia River Gorge National Scenic Area regulations, which affect the lower 1.5 miles of the lower Klickitat river corridor as well as lands upstream and downstream along the Columbia.

REFERENCES AND BIBLIOGRAPHY

- Ahrens, G. 1988. Affidavit for the Superior Court for the State of Washington, Friends of the Columbia Gorge and Bonnie White v. Brian Boyle and SDS Lumber Company, case no. 88-2-0052-1.
- Allen, Stewart and Robert Ratcliffe. 1988. White Salmon Recreation Use Study. Report prepared for USDA, Forest Service, Columbia River Gorge National Scenic Area. October 14, 1988. Hood River, OR.
- Anderson, D., Ichisaka, M.V., Ostwald, M. 1989. Winter Bald Eagle Surveys on the Klickitat and White Salmon rivers, Franz and Arthur lakes, and Hamilton Creek, WA. Washington Department of Wildlife, Vancouver, WA.
- Anderson, J.L. 1987. Geologic map of the Klickitat 15' quadrangle, Washington. Washington Division of Geology and Earth Resources, open file report 87-14.
- Anderson, Dave. 1989. Area Biologist, Washington Department of Wildlife, Vancouver, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA.
- Arno, F.A. and R.P. Hammerly. 1977. Northwest Trees. The Mountaineers, Seattle, WA
- Backus, Frank. 1989. Forester with SDS Lumber Co., Bingen WA. Conversations with Bob Ratcliffe and Gary Weiner, Land and Water Associates, White Salmon, WA. at Upper White Salmon task force meetings July 8 and August 10.
- Backus, F. 1990. Telephone conversation between Frank Backus, SDS Lumber Company, and Gary Weiner, Land and Water Associates, Nov.30.
- Bakke, P., Robinson, B., Igo, J. 1988. Endangered, Threatened, Unique, and Sensitive Plant Species Inventory. USDA, Forest Service, Hood River, OR.
- Bureau of Land Management. 1990. Issues and Alternatives for Management of the Lower Deschutes River. Planning report available from the District Manager, Bureau of Land Management, Prineville, OR.
- Bechtel Inc. 1981. White Salmon River Project: Phase I Conceptual Planning Report. White Salmon, WA: Public Utility District No.1 Klickitat County.

- Bennett, Cliff. 1990. USDA, Forest Service, Mt. Adams District, Trout Lake, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. January 17.
- Brewer, Thomas. 1978. Gorges in Maine. Report for the Maine Critical Areas Program, Natural Resource Planning Division, State Planning Office, Augusta, ME.
- Brown, Jeffrey C. 1979. Geology and Water Resources of Klickitat County. Water Supply Bulletin No.50. Olympia, WA: Department of Ecology.
- Bull, Jim. 1989. USDA, Forest Service Mt. Adams District Ranger, Trout Lake, WA. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at river public meeting April 19.
- Canty, Dennis. 1989. National Park Service, River and Trails Program, Seattle, WA. Telephone conversations and correspondence with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. July.
- Caufield, J.D. and Associates. 1984. Irrigation Diversion Screening Needs on Big White Salmon River above Condit Dam. Report prepared for NOAA National Marine Fisheries Services, Portland, OR.
- Chamberlain, Bob. 1990. SDS Lumber Company, Bingen, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. January 10.
- Chamberlain, James. 1989. Geologist, USDA, Forest Service Zone II Engineers, Willard WA. Telephone conversation with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. April.
- Cole, F. 1989. Washington Employment Security Department, Yakima, WA. Personal communication with Gregory Poremba, Ebasco Environmental Services, Bellevue, WA. November 14.
- Columbia River Gorge Commission and USDA Forest Service, 1991. Final Draft Management Plan for General and Special Management Areas, Columbia River Gorge National Scenic Area.

- Couche, Steve. 1989. Recreation Planner for USDA, Forest Service Mt. Adams District. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. October and December.
- Couche, Steve. 1989. Recreation Planner for USDA, Forest Service Mt. Adams District. Correspondence with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. October 19 and 31.
- Couche, Steve and Cliff Bennett. 1989. USDA, Forest Service Mt. Adams Ranger District personnel, Trout Lake office. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. May 9.
- Coyle, Kevin. 1988. The American Rivers Guide to Wild and Scenic River Designation. Paper prepared by American Rivers, Inc., Washington, D.C.
- Crawford, Rex. 1989. Ecologist, Natural Heritage Program, Washington Department of Natural Resources, Olympia, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. August.
- Dannylchuk, Bernie. 1988. Klickitat River Recreation Use Report. Prepared for USDA Forest Service, Columbia River Gorge National Scenic Area, Hood River, OR.
- Darby, Jerry. 1990. Owner, Heritage Realty, Hood River, OR. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. January 3.
- Department of Landscape Architecture and Regional Planning, University of Massachusetts. 1983. Scenic River Protection Guidelines for the West Branch of the Farmington River, Berkshire County, MA.
- Dreidger, Carolyn. 1989. Glaciologist, USGS, Tacoma, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. May.
- Eddy, Bruce. 1989. Planner, Pacific Power and Light, Portland, OR. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. June.
- Environmental Protection Agency. 1976. Quality Criteria for Water. Washington, D.C.: Environmental Protection Agency.
- Envirosphere Company and the Beckwith Consulting Group 1988. Columbia River Gorge National Scenic Area Recreation Demand Study. Report for the Columbia River Gorge Commission, July 15, 1988. Bellevue, WA.
- Estevez, Joseph. 1989. Hydrologist, USDA, Forest Service Mt. Adams Ranger District, Trout Lake, WA. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. May 9.

- Faler, Mike. 1989. Fisheries biologist with the USDA, Forest Service, Gifford Pinchot National Forest, Trout Lake, WA. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. July.
- Franklin, J. Jeffrey, and C.T. Dyrness. 1973. Natural Vegetation of Oregon and Washington. USDA, Forest Service General Technical Report PNW-8.
- Franklin, J.F., and Dyrness, C.T., 1973. Natural Vegetation of Oregon and Washington. Corvallis, OR: Oregon State University Press.
- Gammon, John. 1989. Botanist, Natural Heritage Program, Washington Department of Natural Resources, Olympia, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. August.
- Garren, John. 1973. Oregon River Tours. Portland, OR: Garren Publishing.
- Gorman, Bob, Jim Gleason and Mark Bryan. 1989. River Safety Committee and Klickitat County Sheriff and emergency services, Goldendale, WA. River safety meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA, August 1.
- Gorman, Bob and Joan Frey. 1989. Task force representative of Klickitat County commissioners and lower Klickitat River rancher/landowner, Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Klickitat River task force meetings. August 8 and September 12.
- Grimes, Skip. 1989. Klickitat County Building Inspector, Goldendale, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. September - December.
- Hammond, Edwin H. 1973. Land surface form map. In Atlas of the Pacific Northwest, 5th edition, Richard P. Highsmith editor, pp. 40-41. Oregon State University Press.
- Hammond, Paul. 1989. Geologist, Portland State University, Portland, OR. Telephone conversations and correspondence with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. July.
- Hammond, P.E., 1980. Reconnaissance geologic map and cross sections of southern Washington Cascade range. Portland, OR.

- Hammond, P.E., R.D. Bentley, J.C. Brown, J.A. Ellingson, and D.A. Swanson. 1977. Volcanic stratigraphy and structure of the southern Cascade Range, Washington. In Geologic Excursions in the Pacific Northwest, edited by E.H. Brown and R.C. Ellis, pp. 127-169. Department of Geology, Western Washington University, Bellingham.
- Harris, Stephen L. 1980. Fire and ice: The Cascade Volcanos. Seattle: The Mountaineers and Pacific Search Press.
- Hathaway, George. 1989. Upper Klickitat rancher/landowner. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at upper Klickitat River task force meeting. October 10.
- Henley, Fred. 1989. Consulting landscape architect, USDA, Forest Service Columbia River Gorge National Scenic Area, Hood River, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Hess, Jurgen. 1989. Landscape architect, USDA Forest Service, Columbia River Gorge National Scenic Area, Hood River, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA.
- Higgins, Joe. 1989. Recreation staff, USDA, Forest Service Regional Office, Portland, OR. Personal communication with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. July.
- Hitchcock, C.L. and A. Cronquist. 1973. Flora of the Pacific Northwest. Seattle: University of Washington Press.
- Hogan, Dave. 1989. Washington State Department of Transportation, Bingen, WA. Telephone conversation with Gary Weiner, Land and Water Associates, White Salmon, WA. September 7.
- Hopkins, Brad. 1989. Water quality, Washington State Department of Ecology, Olympia, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.
- Hopkins, Kenneth D. 1976. Geology of the south and east slopes of Mount Adams Volcano, Cascade Range, Washington. Unpublished doctoral dissertation, University of Washington, Seattle.
- Huff, Mark H. 1986. Environmental Assessment of a proposed Recreational Development in the Upper Trout Lake Creek: Effects on Ungulate Winter Range. Report prepared for Klickitat County Planning Department, Goldendale, WA.

- Ichisaka, M.V., D.P. Anderson, and M. Ostwald. 1989. Winter bald eagle survey on the Klickitat and White Salmon rivers, Franz and Arthur lakes, and Hamilton Creek, Washington. Report for Washington Department of Wildlife. Vancouver, Washington.
- Jantzen, Carol. 1989. Washington State Department of Ecology. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. November.
- Johnson, Jim. 1990. Planning staff, Columbia Gorge Commission, White Salmon, WA. Meeting with Land and Water Associates and USDA Forest Service, Hood River, OR. March 28.
- Johnson, F. 1988. Affidavit for the Superior Court for the State of Washington, Friends of the Columbia Gorge and Bonnie White v. Brian Boyle and SDS Lumber Company, case no. 88-2-0052-1.
- Jolley, R., 1988. Wildflowers of the Columbia Gorge. Portland: Oregon Historical Society Press.
- Jones, W.A. 1887. The Salmon Fisheries of the Columbia River. Army Corps of Engineers Report to Congress.
- Klickitat County Road Department. 1989. Klickitat County road department personnel, Goldendale, WA. Telephone conversations with Bob Ratcliffe and Gary Weiner, Land and Water Associates, White Salmon, WA. October 11.
- Kliene, Tom. 1989. Hydrologist, Oregon State Water Resources, Salem, OR. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. May.
- Klover, Richard. 1989. Area resident and recreationist, Trout Lake, WA. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. December 12.
- Korosec, Michael A. 1987. Geologic map of the Hood River quadrangle, Washington and Oregon. Open file report 87-6 Division of Geology and Earth Resources. Washington State Department of Natural Resources, Olympia.
- Korosec, Michael A. 1987. Geologic map of the Mount Adams quadrangle, Washington. Open file report 87-14 Division of Geology and Earth Resources, Washington State Department of Natural Resources, Olympia.
- Korosec, Michael A. 1989. Geologist, Washington State Department of Natural Resources, Olympia, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. April - May.

- Kreft, Dave. 1990. Soil Conservation Service, Goldendale, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. March.
- Kunz, Dave. 1989. Director, Klickitat County Planning Department, Goldendale, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. August 1989 - March 1990.
- Land and Water Associates 1989. A comparative evaluation of the biotic resource values of the White Salmon and Klickitat Rivers. Prepared for USDA, Forest Service, Columbia River Gorge National Scenic Area. USDA, Forest Service, Pacific Northwest Region, Portland, Oregon.
- Land and Water Associates 1989. A comparative evaluation of deer wintering areas on the Klickitat, White Salmon, and other rivers in the Columbia Gorge region. Prepared for USDA, Forest Service, Columbia River Gorge National Scenic Area. USDA, Forest Service, Pacific Northwest Region, Portland, Oregon.
- Land and Water Associates. 1989. A Systematic Approach to Determining the Eligibility of Wild and Scenic River Candidates. Report prepared for USDA, Forest Service, Columbia River Gorge National Scenic Area, Hood River, OR.
- Land and Water Associates. 1989. A comparative evaluation of recreation resource values of the Klickitat and White Salmon Rivers. Unpublished report submitted to USDA, Forest Service, Columbia River Gorge National Scenic Area, Hood river, OR.
- Land and Water Associates. 1989. A comparative evaluation of cultural resources values of the Klickitat and White Salmon Rivers. Unpublished report submitted to USDA, Forest Service, Columbia River Gorge National Scenic Area.
- Land and Water Associates. 1989. A comparative evaluation of the anadromous fisheries on the Klickitat, White Salmon and other rivers in the Columbia Gorge region. Prepared for USDA, Forest Service Columbia River Gorge National Scenic Area.
- Land and Water Associates. 1989. A comparative evaluation of the resident fisheries on the Klickitat, White Salmon and other rivers in the Columbia Gorge region. Prepared for USDA, Forest Service Columbia River Gorge National Scenic Area.

- Land and Water Associates 1989. A comparative evaluation of the geologic and hydrologic resource values on the Klickitat and White Salmon Rivers. Prepared for USDA, Forest Service, Columbia River Gorge National Scenic Area. USDA, Forest Service, Pacific Northwest Region, Portland, Oregon.
- Lane and Lane Associates, with Douglas Nash. 1981. The White Salmon River: Indian Fisheries and Condit Dam. Report prepared for Bureau of Indian Affairs, Portland, Oregon.
- Larsen, Dave. 1990. Washington State Department of Natural Resources, Olympia, WA. Telephone conversation with Gary Weiner, Land and Water Associates, White Salmon, WA. April 20.
- Leopold, Luna B. 1969. Landscape Esthetics. Natural History, October, pp. 36-45.
- Leopold, Luna B. 1969. Quantitative Comparisons of Some Aesthetic Factors Among Rivers. United States Geological Survey Circular 620.
- Leopold, Luna B. and Maura O'Brien Marchand. 1968. On the Quantitative Inventory of the Riverscape. Water Resources Research, Volume 4, No. 4, August.
- Lewis, Karen. 1989. Task force representative from Lower Columbia Canoe and Kayak Club, Portland, OR. Telephone conversations and correspondence with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. July - December.
- Lind, David. 1989. Fisheries biologist, resources, Yakima Indian Nation, Toppenish, WA. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Litt, Brian. 1990. Recreation Planner, Columbia Gorge Commission, White Salmon, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. April.
- Litt, Brian. 1989. Recreation demand in the Columbia River Gorge National Scenic Area. Report for the Columbia River Gorge Commission, May 23, 1989. White Salmon, WA.
- Logan, Josh. 1989. Geologist, Washington State Department of Natural Resources, Olympia, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. June.
- Maine Land Use Regulation Commission and State Planning Office. 1986. Methodology for Maine's Wildlands Lakes Assessment. Augusta, ME.

- Maser, C. 1988. Unpublished report for Friends of the White Salmon. White Salmon, WA.
- Masten, Ruth A., and Jerry R. Galm. 1989. An Overview of Cultural Resources Within the Wild and Scenic Areas of the White Salmon and Klickitat Rivers, Klickitat and Skamania Counties, Washington. Volume I Draft. Eastern Washington University's Archaeological and Historical Services, report # 100-69 for USDA, Forest Service, Columbia River Gorge National Scenic Area, Hood River, OR.
- McCorquodale, Scott. 1989. Research biologist, resources, Confederated Tribes and Bands of the Yakima Indian Nation, Toppenish, W. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- McCoy, Keith. 1987. Mount Adams Country: The Forgotten Corner of the Columbia Gorge Region. White Salmon, WA: Pahto Press.
- McKee, Bates. 1972. Cascadia: The geological evolution of the Pacific Northwest. New York: McGraw Hill.
- McPherson, Steve. 1989. Washington Recreational River Runners, Seattle, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. March - June.
- McQuary, Julie. 1989. Landscape architect, Envirosphere Company, Belleview, WA. Personal communication with Alec Giffen and Bob Ratcliffe, Land and Water Associates, White Salmon, WA. July and August.
- Mellor, Steve. 1989. Hydrologist, USDA, Forest Service Columbia River Gorge National Scenic Area, Hood River, OR. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. February - December.
- Mellor, Steve. 1989. USDA, Forest Service Wild and Scenic Rivers Planning Team, Columbia River Gorge National Scenic Area. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. December 14.
- Mendez, Rolondo. 1989. Wildlife biologist, Gifford Pinchot National Forest, Mt. Adams Ranger District, Trout Lake, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.
- Moore, James. 1989. Outfitter, Orion River Expeditions, Seattle, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. June.

- Morrison, Dan. 1990. Manager, Klickitat Wildlife Area, Washington State Department of Wildlife, Goldendale, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. February and March.
- Morrison, Dan. 1989. Manager, Klickitat Wildlife Area, Washington State Department of Wildlife, Goldendale, WA. Telephone conversations and correspondence with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. October 21.
- Morrison, Dan. 1989. Manager, Klickitat Wildlife Area, Washington State Department of Wildlife, Goldendale, WA. Telephone conversation with M.C. McShane, Envirosphere Company. December 1.
- National Park Service. 1986. River recreation in Washington: An initial inventory and assessment. Washington State Parks and Recreation Commission, Northwest Power Planning Council and National Park Service Technical Assistance Project, Pacific Northwest Region. Seattle, WA.
- National Park Service. 1982. Nationwide Rivers Inventory. Washington, D.C.: United States Department of Interior.
- North, Douglas. 1989. Northwest Rivers Council, Seattle, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. March.
- North, Douglas A. 1987 and 1988. Washington Whitewater: Volumes 1 & 2. Seattle, WA: The Mountaineers.
- Nelson, Will. 1989. Wildlife biologist, Washington Department of Wildlife, Vancouver, WA. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Netboy, Anthony. 1980. The Columbia River Salmon and Steelhead Trout: Their Fight for Survival. Seattle: University of Washington Press.
- Newton, Jim. 1989. Fisheries biologist, Oregon Dept. of Fish and Game, The Dalles, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Nieland, Jim. 1989. Cave Management Specialist, USDA, Forest Service Mount St. Helens National Monument, Amboy, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. April May.

- Northwest Power Planning Council. 1988. Columbia Basin System Planning: Washougal, Wind, Little White Salmon, Big White Salmon, Klickitat, Umatilla, John Day, Deschutes, Hood, Sandy Subbasin Plans. Northwest Power Planning Council, Agencies and Tribes of the Columbia Basin Fish and Wildlife Authority, Portland, OR.
- Northwest Power Planning Council and Bonneville Power Administration. 1986. Pacific Northwest Rivers Study: Environmental Data Base for Oregon and Washington.
- Pendergast, Linda. 1989. Fisheries biologist, Pacific Power and Light, Portland, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. July.
- Porter, Dave. 1991. June 12 conservation between Dave Porter, Gifford Pinchot National Forest Wild & Scenic Rivers coordinator, and Steve Mellor, USDA Forest Service Columbia River Gorge National Scenic Area.
- Porter, Dave. 1989. Rivers coordinator, USDA, Forest Service Gifford Pinchot National Forest, Vancouver, WA. Telephone conversations with Bob Ratcliffe and meeting with Alec Giffen, Land and Water Associates, White Salmon, WA. July.
- Pringle, Pat. 1989. Geologist, USGS Cascade Volcanoes Observatory, Vancouver, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. June.
- Putnam, Nate. 1989. Engineer with Champion International Corp., Klickitat, WA. Telephone conversations with Gary Weiner and Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Klickitat River task force meetings. August 8 and September 12.
- Ramsey, Buzz, Karen Lewis and Jan Stuart. 1989. Task force representatives for recreation. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Klickitat River task force meetings. August 8 and September 12.
- Reynier, Ron. 1989. Attorney and recreational boater, White Salmon, WA. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. March 23.
- Riley, Jim. 1989. Silviculturist, USDA, Forest Service Gifford Pinchot National Forest, Randle Ranger District, Randle, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. August.
- Sarver, Brad. 1989. President, Professional River Outfitters of Washington, Pacifica, WA. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at task force meetings. June September.

- Schmidt, John L. and Douglas L. Gilbert (eds.). Wildlife of North America. Stackpole Books.
- Schuster, Helen H. 1974. Yakima Indian Traditionalism: A Study in Continuity and Change. Unpublished doctoral dissertation, University of Washington, Seattle.
- Shipp, Alan. 1989. Klickitat County Assessor, Goldendale, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October -February, 1990.
- Starlund, Steve. 1989. Meeting with Steve Starlund, Director, Washington State Scenic Rivers Program; Stewart Allen and Gary Weiner, Land and Water Associates; State Representative Holly Myers and State Senator Dean Sutherland; Jim Hulbert, U.S. Forest Service; Bob Gorman and Dave Kunz, Klickitat County. Carson, WA, November 17.
- Stein, Marty. 1989. Botanist, USDA, Forest Service Gifford Pinchot National Forest, Mt. Adams Ranger District, Trout Lake, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.
- Taylor, Dick. 1989. Biologist, Natural Heritage Program, Washington Department of Wildlife, Olympia, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.
- Thie, Krista. 1988. Threatened, Endangered, and Sensitive Plant Survey, White Salmon River. USDA, Forest Service, Columbia River Gorge National Scenic Area, Hood River, OR
- Thomas, Jim. 1990. Washington State Department of Natural Resources, Olympia, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. January 4.
- Thule, John. 1989. Water quality staff, Washington State Department of Ecology, Olympia, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.
- Tichnell, Beth ed. 1989. Upper White Salmon River: Affected Environment. USDA, Forest Service Mt. Adams Ranger District report presented to Land and Water Associates. Unpublished. December.
- Topik, Chris. 1989. Associate Area Ecologist, USDA, Forest Service Mt. Hood and Gifford Pinchot National Forests, Gresham, OR. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.

- Torland, Jim. 1989. Wildlife biologist, Oregon Department of Fish and Game, The Dalles, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Trout Lake and Klickitat Public Meetings. 1989. Meeting minutes. Comments received from area residents at public meetings in Trout Lake and Lyle, WA. April 19, 20 and December 6, 7.
- U.S. Bureau of the Census. 1982. General Social and Economic Characteristics: Washington. PC-80-1-C49. Volume 1, Chapter C. Washington, D.C. U.S. Government Printing Office.
- U.S. Bureau of the Census. 1982. General Population Characteristics: Washington. PC-80-1-B49. Volume 1, Chapter B. Washington, D.C.: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1988. County and City Data Book. Washington, D.C.: U.S. Government Printing Office.
- U.S. Commissioner of Fisheries. 1937. Bonneville Dam and **Protection of** the Columbia River Fisheries. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Energy. 1984. Stock Assessment of Columbia River Anadromous Salmonids. Volume I: Chinook, Coho, Chum and Sockeye Salmon Stock Summaries. United States Department of Energy, Portland, OR.
- U.S. Department of Energy. 1984. Stock Assessment of Columbia River Anadromous Salmonids. Volume II: Steelhead Stock Summaries. Stock Transfer Guidelines - Information Needs. United States Department of Energy, Portland, OR.
- USDA, Forest Service. 1990. Gifford Pinchot National Forest Land and Resource Management Plan.
- USDA, Forest Service. 1989. Klickitat River recreation use survey. Raw data collected by USDA, Forest Service Mt. Adams Ranger District. May through November.
- USDA, Forest Service. 1986. Results of stream surveys conducted in September of 1986 on the White Salmon River from river mile 31 to river mile 37.8. Watershed Department, Gifford Pinchot National Forest, Mt. Adams Ranger District, Trout Lake, WA.
- USDA, Forest Service. 1974. National Forest Landscape Management, Volume 2. USDA, Forest Service Agriculture Handbook Number 462, Washington DC: U.S. Government Printing Office.

- U.S. Department of the Interior, Bureau of Land Management. 1990. Issues and Alternatives for Management of the Lower Deschutes River. Prineville, OR.
- U.S. Department of the Interior, Bureau of Land Management. 1980. Visual Assessment Guidelines. Washington, D.C.
- U. S. Department of the Interior, Bureau of Reclamation. 1974.
 White Salmon Division, Columbia North Side Project,
 Washington. Appraisal Report. United States
 Department of the Interior, Bureau of Reclamation.
 Washington, D.C.
- U.S. Geological Survey. 1989. Water Quality data collected on the White Salmon and Klickitat Rivers. Tacoma, WA.
- U.S. Geological Survey 1909, 1956 and 1974. Topographical maps and dam site surveys. Bureau of Land Management, Mineral Management Division, Oregon State Office, Portland.
- Vallance, James. 1989: Geologist, Michigan Technological University, Houghton, MI. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. April - May.
- Vallance, James W. 1986. Late Quaternary volcanic stratigraphy on the southwestern flank of Mount Adams Volcano, Washington. Unpublished Masters thesis, University of Colorado, Boulder.
- Waitt, R.B., 1985. Case for periodic, colossal jokulhlaups from Pleistocene glacial lake Missoula. Geological Society of America Bulletin, vol. 96, no. 10, p.1271-1286.
- Walsh, T.J. et al., 1987. Geologic map of Washington southwest quadrant. Washington Division of Geology and Earth Resources, geologic map GM-34.
- Washington Rivers Information System. 1985. Component of the Pacific Northwest Rivers Study, prepared for Bonneville Power Administration, Portland, OR.
- Washington State Law 1986. Washington State Law 91.14 ch. 217: Passenger water craft for hire operation.
- Washington State Office of Financial Management, Forecasting Division. 1989. 1989 Population Trends for Washington State. Olympia, WA. August.
- Washington State Office of Financial Management, Forecasting Division. 1982. 1982 Population Trends for Washington State. Olympia, WA. August.
- Washington State Recreation and Parks Commission. 1988.
 Washington State Scenic Rivers Inventory and
 Assessment. Washington State Scenic Rivers Program:
 Olympia.

- Washington State Department of Ecology. 1989a. Ambient Water Quality Monitoring Program Data. Water quality data for Klickitat and White Salmon Rivers. Olympia, WA.
- Washington State Department of Ecology. 1989b. Nonpoint Source Pollution Assessment and Management Program. Report prepared by Water Quality Program, Olympia, WA.
- Washington State Department of Transportation. 1989. Traffic monitoring staff, WA Department of Transportation offices Vancouver, WA and Bingen, WA. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. October.
- Washington State Department of Wildlife, lead agency. 1988. Columbia Basin System Planning: Draft Big White Salmon Sub- basin Plan. Linda Pendergast, editor, coordinated with Northwest Power Planning Council and the Agencies and Indian Tribes of the Columbia Basin Fish and Wildlife Authority, Portland, OR.
- Washington State Department of Wildlife. 1987. Summary of 1986 summer-run and 1986- 87 winter-run steelhead trout sport catch in Washington. State of Washington, Department of Wildlife: Olympia, WA.
- Washington State Department of Wildlife and Bureau of Land Management. 1972. Report on Klickitat River Unit Wildlife Habitat. Statistics prepared for Klickitat State Wildlife Area, BLM-Klickitat River Unit, Vancouver, WA.
- Wehrman, John. 1989. Forester, Champion International Corp., Klickitat, WA. Conversations with Gary Weiner and Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Upper White Salmon River Task Force meeting. October 5.
- Weinheimer, John. 1989. Field officer and fisheries biologist for Washington Department of Wildlife, Carson, WA. Meetings and personal communications with Alec Giffen, Bob Ratcliffe, Land and Water Associates, White Salmon, WA. and Domoni Glass, Ebasco Environmental, Belleview, WA. May 4 and December 7 & 8.
- West, Pete. 1989. Task force representative for recreation, Portland, OR. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. April December.
- White, Jim. 1989. Silviculturist, Gifford Pinchot National Forest, Mt. Adams Ranger District, Trout Lake, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October.

- Willamette Kayak and Canoe Club. 1988. Soggy Sneakers: Guide to Oregon Rivers, 2nd edition. Corvallis, OR: Willamette Kayak and Canoe Club.
- Winther, Arlie. 1990. Army Corps of Engineers, Portland, OR. Telephone conversation with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. January 4.
- Wold, Einar. 1989. Division Chief, National Marine Fisheries Service, Portland, OR. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Wright, Sam. 1989. Washington State Department of Fisheries, Olympia, WA. Conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Klickitat River task force meetings. August 8 and September 12.
- Wright, Sam. 1989. Fisheries biologist, Washington State Dept. of Fisheries, Olympia, WA. Personal communication with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Yakima Indian Nation, lead agency. 1988. Columbia Basin System Planning: Draft Klickitat Sub-basin Plan. Steve Parker, editor, coordinated with Northwest Power Planning Council and the Agencies and Indian Tribes of the Columbia Basin Fish and Wildlife Authority, Portland, OR.
- Young, Bill and Elaine Rybak. 1986. Estimated Anadromous Salmonid Production Potential for the White Salmon River. Unpublished report.
- Zimmerman, Tara. 1989. Habitat specialist, WA State Department of Wildlife, Vancouver, WA. Telephone conversations with Gary Weiner, Land and Water Associates, White Salmon, WA. October December.
- Zimmerman, Tara. 1989. Habitat specialist, WA State Department of Wildlife, Vancouver, WA. Meeting with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. at Columbia River Gorge National Scenic Area office, Hood River, OR. March 24.
- Zimmerman, Tara. 1989. Habitat specialist, WA State Department of Wildlife, Vancouver, WA. Personal communications and meeting with Alec Giffen, Land and Water Associates, White Salmon, WA. August.
- Zoller, Lori and Tracy. 1989. White Salmon and Klickitat whitewater outfitters and guides. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. May 17 & July 25.

- Zoller, Phil. 1989. White Salmon and Klickitat whitewater outfitter and guide. Telephone conversations with Bob Ratcliffe, Land and Water Associates, White Salmon, WA. June 9 and July 26.
- Zoller, Phil. 1990. White Salmon River outfitter and guide. Conversation with Bob Ratcliffe, Land and Water Associates, White Salmon, May 2.



List of Preparers & EIS Mailing List



The lower 1.5 miles of the Klickitat lie within the Columbia River Gorge National Scenic Area (view up the Klickitat from the Columbia River).

List of Preparers

Name:

Responsibilities:

Qualifications:

Land and Water Associates (contractors responsible for all phases of the study, including Task Force development and coordination, public involvement, development of study alternatives, and LEIS production)

Stewart Allen

EIS Project Manager, Editor, Recreation, Public involvement Ph.D. Recreation Management M.A. Environmental Psychology

B.A. Psychology B.A. Journalism

10 years of experience in environmental impact assessment and natural resource research, planning, and management

R. Alec Giffen

Eligibility analysis

M.S. Ecology B.S. Forestry

coordinator

15 years of experience in natural resource

planning and administration

Drew Parkin

Project Administration, Public involvement. Cultural Resources and Native American concerns M.C.R.P. (Community and Regional Planning) B.S. International Relations

15 years of experience in natural resource

policy and land use planning

Bob Ratcliffe

Recreation,

Public involvement

M.S. Recreation Management

B.S. Outdoor Recreation 10 years of experience in environmental

interpretation and recreation planning

Gary Weiner

Land Use

M.L.A. (in progress) B.S. Natural Resources

8 years of experience in natural resource

planning and management

Cascade Planning Associates (subcontractors)

Steven Andersen

Maps

M.S. Resource Geography

14 years of experience in land use planning

Ebasco Environmental (subcontractors)

Randy Fairbanks

Ebasco team leader,

vegetation

M.S. Wildlife Science and Biostatistics

B.S. Wildlife Science

16 years of experience in impact assessment

and ecological research and inventory

Domoni Glass

Fish and instream resources

 $M.S.\ Fisheries\ Biology\ (in\ progress)$

B.S. Fisheries Biology

8 years of experience in impact assessment and fisheries management and monitoring

Julie McQuary

Visual Resources

M.L.A.

B.S. Recreation & Park Administration 10 years of experience in landscape architecture and recreation area design and

planning

Greg Poremba

Socioeconomics

Ph.D. Sociology

M.A. Sociology and Statistics B.A. Sociology and English

11 years of experience in social impact assessment, demography, and land use

planning

M. Colleen McShane

Wildlife Biologist

M.B.A. Project Management

M.S. Plant Ecology B.A. Biology

13 years of experience in vegetation and wildlife inventory and evaluation

Jonathan Harbor

Geology/Hydrology

Ph.D. Geology (in progress)

9 years of experience in geology and

geomorphology

Tom Goodlin

Geology/Hydrology

M.S. Geology

B.S. Geology

5 years of experience in geology and

hydrogeology

Task force members and alternates:

Frank Backus SDS Lumber Co. Bingen, WA. John Bloxum Jr. Mt. Adams Orchards Yakima, WA.

Swerre Bakke

Klickitat County commissioners

White Salmon, WA.

Jim Bull

USDA, National Forest Gifford Pinchot N.F. Mt. Adams District Trout Lake, WA.

Cliff Bennett

USDA, Forest Service Gifford Pinchot N.F. Mt. Adams District Trout Lake, WA.

Bob Chamberlain SDS Lumber Co. Bingen, WA.

L-4 List of Preparers & Mailing List

Joan and Dan Frey landowners and ranchers Lyle, WA.

Leonard Dave

Native American fishermen and landowner Lyle, WA.

Bob Gorman Klickitat County Goldendale, WA.

George Ing

Mt. Adams Orchards White Salmon, WA.

Johnny Jackson River People Underwood, WA.

Lon Johnson landowner and farmer Trout Lake, WA.

Art Justman III landowner and rancher Wahkiacus, WA.

Gary Kahn Friends of the Columbia Gorge Portland, Or.

Karen Lewis Lower Columbia Canoe Club Portland, OR.

Bill Locke landowner and farmer Husum, WA.

Dan Morrison Washington Department of Wildlife Klickitat Wildlife Area Goldendale, WA.

Mike Quantrell landowner Wahkiacus, WA.

Buzz Ramsey sportfishermen and landowner Klickitat, WA.

Mike Sandlin Mt. Adams Orchards Underwood, WA. Brad Sarver Professional River Outfitters of WA.

Pacifica, WA.

Elmer Schuster Yakima Indian Nation Toppenish, WA.

Richard C. Smith landowner Husum, WA.

Walter Speedis Yakima Indian Nation General Council Toppenish, WA.

Jerry Stone landowner and tourism business White Salmon, WA.

Krista Thie botanist White Salmon, WA.

John Wehrman Champion International Corporation Klickitat, WA.

Bill Weiler Washington Environmental Council Lyle, WA.

Pete West private boater Portland, Or.

Dennis White Friends of the White Salmon White Salmon, WA.

Larry Williams landowner and rancher Trout Lake, WA.

Sam Wright Washington State Department of Fisheries Olympia, WA.

William Yallup Yakima Indian Nation Toppenish, WA.

Tara Zimmerman Washington State Department of Wildlife Vancouver, WA. Phil Zoller outfitter B2 Corner, WA.

Tracy and Lori Zoller outfitters

White Salmon, WA.

6.2 Persons to whom LEIS was mailed:

Task Force members (see list in Section 6.1)

List of interested parties:

Al Ainsworth Northwest Rafters Association Portland, OR.

Larry Andreas Yakima Steelheaders Toppenish, WA.

Bruce Apple National Wildlife Federation Portland, OR.

Al Austin
WA Department of Natural Resources
Trout Lake, WA.

Bill Bradley Yakima Nation Natural Resources staff Toppenish, WA

Monte Brown landowner and recreationist Longview, WA.

Dennis Canty National Park Service Seattle, WA.

Mike Chabbert landowner Boring, OR.

Columbia Gorge Commission White Salmon, WA.

Norm Crampton WA State Department of Transportation Goldendale, WA

Gerald and Nancy Dunn landowners Camus, WA. Bruce Eddy Pacific Power and Light

Jim Fisher Bureau of Land Management Wenatche, WA.

Phil Giles Soil Conservation Service White Salmon, WA.

Senator Slade Gordon U.S. Senate Seattle, WA.

Bill Gross Klickitat County Shorelines Advisory Committee White Salmon, WA.

Jim Gonsolus for Sen. Brock Adams member U.S. Senate Seattle, WA.

Lynn Hatcher Yakima Nation Natural Resources, Staff Toppenish, WA.

George Hathaway Sr. rancher and landowner Glenwood, WA.

George Hathaway Jr. rancher and landowner Glenwood, WA.

Clayton Hawkes National Marine Fisheries Service Portland, OR.

Bethewel Hendrix landowner White Salmon, WA.

Art Hoisington Klickitat County Shorelines Advisory Committee Husum, WA.

Bob Jolley Trout Lake Community Council Trout Lake, WA.

Dave Kunz Klickitat County Planning Department Goldendale, WA.

Steve Lannoy U.S. Fish and Wildlife Service Olymbia, WA.

L-6 List of Preparers & Mailing List

John Marsh Northwest Power Planning Council Portland, OR.

Les McConnell Bureau of Indian Affairs Portland, OR.

Steve McPherson river recreationist Seattle, WA.

Scott McCorquodale Yakima Nation Resource Staff - Wildlife Toppenish, WA.

Holly Myers Washington State Representative Olympia, WA.

Sue Miller for Rep. Sid Morrison U.S. Congress Kennewick, WA.

Sandy Nelson Northwest Rivers Council Seattle, WA.

Cynthia Nelson WA Department of Ecology Olympia, WA.

Kim Peery Washington State Representative Olympia, WA.

Ken Pellans Burlington Northern Railroad Vancouver, WA.

Lanny Quakenbush WA Department of Natural Resources Ellensburg, WA.

Barbara Robinson The Nature Conservancy Oregon City, OR.

Ken Slattery WA Department of Ecology Olympia, WA.

Kathy Sneider Husum Community Council Husum, WA. Steve Starlund WA State Scenic Rivers Program Olympia, WA.

Clyde Story Soil Conservation Service Goldendale, WA.

Others to whom LEIS was mailed:

Advisory Council on Historic Preservation

Department of Agriculture
Animal and Plant Health Inspection Service
Office of Equal Opportunity
Rural Electrification Administration
Soil Conservation Service

Department of Commerce National Marine Fisheries Service

Department of Defense
Deputy Assistant Secretary of Defense
Deputy Assistant Secretary of the Air Force
Chairman, Department of Defense Explosives Safety
Board
U.S. Army Engineering and Housing Suport Center
Chief of Navy Operations

Department of Energy

Environmental Protection Agency
EIS Review Coordinator, Region X

Federal Energy Regulatory Commission
Division of Rulemaking and Legislative Analysis
Office of Pipeline and Producer Regulation
Office of Hydropower Licensing

General Services Administration

Department of Health and Human Services

Department of Housing and Urban Development Regional Administrator, Region X

Department of the Interior

Interstate Commerce Commission

Department of Labor

Department of Transportation
Assistant Secretary of Policy & International Affairs
Office of Pipeline Safety
U.S. Coast Guard
Federal Aviation Administration
Federal Highway Administration



APPENDIX A

Public Comments on the Draft EIS

The formal public comment period began on August 3, 1990, with a Notice of Intent published in the Federal Register and ended on September 17, 1990. The sections below include all comments received and respond to substantive issues raised in the comments.

Number and Type of Comments Received

A public meeting to provide an opportunity for verbal comment on the Draft EIS was held in Lyle on September 5, 1990. The meeting was attended by about 50 members of the public; the meeting minutes are attached.

In addition, 23 written comments were received. These included 10 letters from individuals or families, 4 letters from private groups, organizations, or companies, 2 from Knekitat County (Board of County Commissioners; Planning Department), 1 from the State of Washington, 5 from federal agencies or councils, and 1 from Indian tribes.

2. How Comments Were Incorporated Into the Final EIS

Federal law and implementing guidelines specify that Final EIS's address public comments using one or more of the following techniques (40 CFR 1503.4; Ch 42.5 of FSH 1909.15):

- Modifying alternatives (including the proposed action);
- Developing and evaluating new alternatives that address new issues, concerns, and opportunities;
- Supplementing, improving or modifying analyses;
- Making factual corrections;
- Explaining why the Forest Service used the rationale, authorities and sources in the draft document why the Agency's position is maintained in the Final.

In this Final document, public comments have been incorporated a number of ways:

- 1. All letters received are printed in this appendix; substantive issues raised in the letters are responded to on the adjacent page.
- 2. The minutes from the public meeting in Lyle, including responses provided to questions at the meeting, are provided in this appendix.

- 3. Technical corrections, such as comments from the Klickitat County Planning Department, were entered directly into the text.
- 4. The section on Key Study Issues in the Final EIS (Chapter 2, Section 2.1) was modified to reflect public comment, including representative quotes or statements paraphrased from the letters and public meetings. 5. The Task Force was provided with a compilation of public comments before it met to attempt to reach consensus on its preferred alternative, ensuring that the comments were built into this critical stage of the process. The proposed preferred alternative that Land and Water Associates developed for the Task Force to use as a starting point for discussion cited comments when explaining the rationale for the proposed alternative.

3. Response to Substantive Comments

This section responds to the substantive issues raised in the letters received (responses to specific questions raised by individuals at the public meeting are included in the attached meeting minutes and are not repeated here). The comment numbers correspond to the numbers noted in the margins of the letters, which are included at the end of this section.

The Forest Service Handbook defines a substantive comment as one that provides factual information, professional opinion, or informed judgement germane to the action being proposed. These comments include those that directly question the content of the EIS (including the adequacy and scope of the alternatives, the analyses conducted, or the methods used to prepare the Draft EIS) as well as those that express a concern about the effects of proposed actions on the social, biological, physical, and economic aspects of the river and its corridor. Comments that suggested brief rewording or that updated information were incorporated directly in the text of the Final EIS.

- 1. The text has been modified (see Section 3.6) to include the Military Training Route as an existing use of the river corridor. None of the alternatives contain measures that would affect this existing use of the airspace over the lower Klickitat, and no concerns with this existing use of the airspace were raised by the public.
- 2. Newsletters announcing the availability of the Draft EIS were mailed to over 1,500 people, including all known people who own land within the corridor.
- 3. The process used to identify the boundaries was described in Section 1.5 of the Draft EIS. Viewshed was just one of many characteristics taken into account when the boundaries were initially identified.

Many members of the public and the Task Force commented that the boundaries were wider than needed. Based on these

comments, and to be consistent with the boundaries specified for rivers in the Washington State Scenic program, Alternative 2 (preferred) would narrow the boundaries to 1/4 mile from the ordinary high water mark on each side of the river; this eliminates about 100 acres per mile from the initial boundaries. In addition, Alternative 2 would create a primary area of focus; most management actions would address only the 200' area already addressed by the Shorelines Master Plan. Actions outside that area but inside the 1/4 mile mark would be taken only to prevent or mitigate actions that would directly degrade river values. Sections 2-3 and 2-4 in the Final EIS describe other measures that would be taken under this alternative to minimize impacts to private property rights.

- 4. The Shorelines Master Plan, described in Section 3.5 of the Draft EIS, is one of the foundations of Alternative 2 (preferred). County planners have said that enforcement of the existing regulations would be improved with increased funding, which would be provided under that alternative.
- 5. It's reasonable to expect that donation of a conservation easement could affect the resale value of property, because the landowner could no longer sell the rights that had been donated. However, the idea underlying the conservation easement concept is that losses are offset by advantageous adjustments to property and income tax. These advantages are even more significant to landowners who do not intend to sell their property and want to continue to use their land for current purposes and realize tax savings. It is also possible that a successful conservation easement donation program could actually increase land values as future buyers may be willing to pay a premium for the guarantee that surrounding lands will not be overly developed.
- 6. The revised Alternative 2 described in Chapter 2 of the Final EIS provides for additional protection of resources compared to Alternative 2 in the Draft EIS, as well as providing for compensation to lanowners. If the River Committee felt that specific timber harvest or other activities would unacceptably affect river resources, the Committee would first work with the landowner to reach mutually acceptable mitigation. If this were unsuccessful, the Committee would have the authority and a limited amount of funding to purchase easements, arrange land swaps, or otherwise mitigate the effects of the proposed action.
- 7. County zoning does not provide for compensation to landowners, which is one of the reasons why new zoning regulations were not used as a foundation for resource protection.
- 8. Donation of conservation easements would be one way that landowners could deal with rising property values.
- 9. If for some reason the lower river is not added to the state system, it still would be part of the federal system, and the interim management strategy described in Appendix B would become permanent. Assuming the river is added to the state

system and the state takes the lead, river management would be more than a coordinating mechanism. Chapter 2 and Appendix B provide a detailed list of actions that would be taken under Alternative 2. The state and federal representatives to the Task Force agreed on an approach to condemnation, described in Chapter 2, when they reached consensus.

- 10. Alternative 2 (preferred; see Chapter 2) provides many of these benefits.
- 11. The proposal to reduce the size of the rural residential area near Pitt has been dropped from the preferred alternative.
- 12. Alternative 2 (preferred) does not call for any reductions in grazing.
- 13. This change has been made (see Chapter 2).
- 14. Alternative 2 (preferred) states that noncommercial use of the river by boaters will not be regulated until more data are collected on existing recreational use patterns. However, the Task Force was clear that protecting the dip-net fishing resource would be a higher priority than providing boating opportunities in the gorge section.
- 15. See answer to # 14.
- 16. There probably is a better term to use in this context than condemnation, but it has a precise legal definition. In order to avoid giving an erroneous impression, the management plan will refer to this as "landowner-requested" condemnation. Under the preferred alternative, the state would not have condemnation authority; the Forest Service could use its condemnation authority, but only as a last resort and upon recommendation of the Management Committee.
- 17. This statement was made for the county as a whole; rapid growth in Portland will not necessarily create new growth in Goldendale. It is true that growth rates along the Columbia and other prime property would be expected to increase faster than would rates in the rest of the county.
- 18. The revised Alternative 2 (preferred) in the Final EIS could be described as Alternative 2 with Alternative 3 goals (as both were characterized in the Draft EIS).
- 19. Alternative 2 (preferred) would add the lower Klickitat to the State Scenic River System and designate the state as the lead agency for coordinating management activities. Because this will require an act of the Washington State legislature, the Forest Service would be responsible for management in the interim.
- 20. See response #3.
- 21. The management plan for Alternative 2 (see Appendix B) makes the state the lead in securing state designation for the lower Klickitat, and provides federal financial support for many management activities.

- 22. Thank you.
- 23. The management plan (Appendix B) contains goals and objectives and the accompanying actions needed to maintain and protect dip-net fishing, scenery, and biological diversity, particularly Oregon white oak habitat.
- 24. The Draft EIS outlines four possible courses of action that could be taken for management of the lower Klickitat; the impacts of each alternative to the local economy, private property rights, and existing land uses were identified. Alternative 2 (preferred) in the Final EIS was refined from the Draft EIS based primarily on comments from the public and Task Force (for example, see answer #3). A major assumption of Alternative 2 is that landowners have been good stewards and that existing regulations are adequate in most cases. Landowners would be represented on the River Committee, making sure that their views will continue to be used to shape future management actions.
- 25. No lands would be confiscated under any of the alternatives, and existing uses would continue. Nature "manages" many characteristics of the river, as you point out, but does not "manage" others, such as shoreline development. In the case of the lower Klickitat, managing is the process of setting goals for what the river and its adjacent lands should look like in the future, and of deciding what, if any, actions are needed to attain this desired future condition. The county and state have many management mechanisms in place already, such as the Shorelines Master Plan, or fishing regulations. These are designed to meet goals that have been accepted by society as desirable. All through the EIS process, impacts to private land and landowners have been considered just as strongly as has resource protection. Alternative 2 (preferred) is a reasonable attempt to balance these concerns, which are often mutually compatible.
- 26. Map 3-3 describes the existing county zoning in the river corridor. The Open Space category does not mean that housing is not allowed, it just means that there is a 20-acre minimum lot size required. By using this zoning for this area, the county is saying that this area should be left mostly undeveloped. Open Space zoning definitely does not give campers or other recreation visitors the right to trespass on private lands. Readers also should keep in mind that the county's Open Space category is very different from the Open Space designation used in the Columbia River Gorge National Scenic Area management plans.
- 27. See answer #3.
- 28. The text has been changed to reflect the recent update (see Section 3.5).
- 29. The text has been changed to reflect this (Section 3.5).
- 30. This text has been changed (see Section 3.5).

- 31. The text has been changed to reflect this information (Section 4.3).
- 32. Alternative 2, modified as described in Chapter 2, is the preferred alternative.
- 33. The text has been changed to include mention of Big Muddy Creek as a contributor to sedimentation (Section 3.12). The Draft EIS (p. 4-10) stated that logging in the Klickitat River canyon likely has not significantly degraded water quality.
- 34. Alternative 2, with the modifications described in the Final EIS, is the preferred alternative.
- 35. The text has been changed to reflect this (Table 2-1 and Section 3.9).
- 36. The preferred alternative incorporates water quality and water quantity controls (see Chapter 2).
- 37. The text has been changed (Section 3.1; Box 3-4).
- 38. The text has been changed to reflect this (Section 3.9).
- 39. Alternative 2 (preferred) would maintain water quality and would manage shorelines to protect anadromous fish and other outstanding values.
- 40. Landowners were notified of the public meeting held in Lyle and were mailed copies of the Draft EIS. The newsletters were designed to keep landowners and others informed and provide open communication.
- 41. Alternative 2 (preferred) would add the river to the state system and designate the state as the lead in coordinating management.
- 42. See answer #3.
- 43. This action has been incorporated into Alternative 2.
- 44. See answer #36.
- 45. This action has been incorporated into Alternative 2.
- 46. The Forest Service and Yakima Indian Nation would both be represented on the River Committee (see Chapter 2).
- 47. The area near the mouth is included in the Columbia River Gorge National Scenic Area. A recreation plan is being prepared for the Scenic Area as one component of an overall Gorge management plan. The management plan for the Klickitat River (see Apendix B) recognizes the need for river management to be coordinated with the plan for the Scenic Area and defers to that plan regarding recreation planning within the Gorge boundaries.

- 48. This site, adjacent the existing county park, was formerly leased by a private landowner to the county for use as part of the park. However, this agreement was discontinued due to lack of county funding to continue the lease. The preferred alternative would purchase this five-acre site (from the willing landowner) so it could be managed to provide public access.
- 49. The state's procedures for designation, including public involvement, would be followed before the river is added to the state system.
- 50. This interpretation of NEPA is incorrect. The CEQ regulation cited by this commentor (CEQ 1502.14(e) states that agencies shall:

Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such an alternative in the final statement unless another law prohibits the expression of such a preference.

The Draft EIS explicitly specified (p. iv, p. 2-6) that the Forest Service did not have a preferred alternative at the Draft EIS stage, but that a preferred alternative would be identified and assessed in the Final EIS. This stance is clearly within the specified regulations. Furthermore, NEPA and its implementing regulations specify that if there is a preferred alternative, it should be described and assessed at the same level of detail as other reasonable alternatives identified. Thus even if a preferred alternative had been identified, it would have been inappropriate to discuss it at a greater level of detail, as is suggested in the last line of this comment.

- 51. The environmental consequences chapter has been modified to highlight Outstanding resources and the probable effects of each alternative on these resources. A new section has been added to address impacts to the geology of the gorge (Section 4.7).
- 52. Maps have been changed to reflect this. The 448 acres of BLM lands administered by the Forest Service will continue to be managed under the existing 1987 Spokane Resource Management Plan, provided that any new land use activities be compatible with Wild and Scenic designation.
- 53. For Alternatives 3 and 4 any federal aquisitions would be for the purposes of either providing public access or protecting significant plant or wildlife habitat or other resources such as scenery. Any other uses of these lands, such as timber harvest, mineral extraction, or grazing would need to be compatible with the primary objective for acquiring the land.
- 54. The management plan addresses this (see Appendix B).
- 55. See Response #52.
- 56. Prior to this study no process or criteria existed to provide guidance for identifying Outstanding resources as required by the Wild and Scenic Rivers Act and the 1982 Interagency

Guidelines. As such, Land and Water Associates, the contractors for the study, prepared a proposed process in consultation with appropriate Forest Service, Bureau of Land Management, and National Park Service officials. The process is described in a report entitled "A Systematic Approach to Determining the Eligibility of Wild and Scenic River Candidates." A series of reports were subsequently prepared that applied this process, including individual reports on anadromous fish, biotic resources, cultural resources, deer wintering areas, geologic and hydrologic resources, recreation, resident fish, and scenery. Appropriate resource specialists were asked to review draft reports. Findings from all of these resource areas were consolidated in a summary eligibility report. All of these documents are available for inspection.

- 57. The text has been changed to reflect this comment (Section 3.7). The Forest Service is currently working with this landowner to reach a mutually acceptable agreement on a price for purchasing this land.
- 58. The preferred alternative would rely on existing regulations; existing land uses would continue.

Public Meeting on the Draft EIS

A Meeting to Obtain Public Comment on the Draft EIS was Held on September 5, 1990, in Lyle, WA. The meeting was attended by about 50 members of the public, three Forest Service representatives, and three members of Land and Water Associates, the consulting firm hired by the Forest Service to prepare the draft EIS.

Drew Parkin of Land and Water Associates opened the meeting by explaining the purpose of the meeting, which was to provide an opportunity for people to comment on the lower Klickitat Wild and Scenic River Management Plan draft EIS. These comments will be added to the written ones received, and the final EIS will describe how the comments were considered in development of a preferred alternative.

Drew then provided background on the EIS and the entire management planning process, including the Task Force and boundary setting process; this information was taken directly from the draft EIS and so is not repeated here. Gary Weiner of Land and Water Associates then briefly reviewed the four alternatives contained in the draft EIS (the handout used as a basis for this summary is attached to the minutes). Land and Water Associates said that the Forest Service has stated that Alternative 1 (the no-action alternative) may not be legal to implement because it does not meet federal standards for Wild and Scenic River management. A Forest Service representative said that, at a minimum, water quality monitoring would have to be added to Alternative 1 for it to be legally implementable. Following is a list of public comments and questions received during the course of the meeting; although not verbatim, they summarize the comments in terms of both the content and length. Land and Water's (or, in some cases, the Forest Service's) responses to questions are in italics.

Meeting Minutes

1. Why is the boundary wider than an average of 1/4 mile from each side of the river? It's nearly two miles wide in some places.

Visual resources was a main concern.

- 2. I thought that the 1/4 mile figure was a maximum allowed. We fought the Scenic Area legislation and now have come to believe that whatever action is the worst will probably be done.
- 3. What does Wild and Scenic designation have to do with the Klickitat?

The lower Klickitat was added to the National Wild and Scenic Rivers System by the legislation creating the National Scenic Area. The Forest Service was directed to prepare a management plan for the river.

4. I want the group that's here to develop its own alternative.

We encourage you to write this up and submit it to the Forest Service. The deadline for comments on the draft EIS is September 17, 1990.

5. What do you (Drew Parkin) want to see done for management?

Land and Water Associates was hired by the Forest Service to conduct the management planning process. We are impartial and do not have a preference. The Forest Service will make the final decision.

6. What happened to a vote on this?

Congress already showed its preference by designating the river.

7. What's the time frame for this process?

We're hoping for a fairly quick turnaround time; we'll have a draft version of the final EIS in a couple of months. The Forest Service probably will have a decision about the first of next year.

8. Who has managed the river until now, and what do the alternatives say?

(This question led into Gary Weiner's presentation of the four alternatives proposed in the draft EIS)

9. What about the state action under Alternative 2; does this supersede the Shorelines Plan?

The existing Shorelines Plan recently approved by the county would be used under Alternative 2.

10. Alternative 2 would include state designation of the stretch along the town of Klickitat, which hasn't been involved in the planning process. This is unfair to all of those people.

The state legislature would have to act in order to add that stretch of river to the state system. As part of that process, Klickitat residents would be asked to become involved before any decisions are made.

11. Things like requiring vegetative screening sound ok until you look at them more closely; we could get denied permits to build.

In some cases, such permits could be denied.

12. If you have an existing house and it burns down, can you rebuild it?

Yes.

13. What are the water quality controls referred to in the draft EIS?

The alternatives contain water quality monitoring programs which would be undertaken to make sure river water was not being polluted. If pollution was detected, actions could then be taken to restore water quality.

14. Has water quality been monitored?

It was monitored near Pitt up to about 4 years ago.

15. Who's representing the tribe here? What do they think?

- 16. Over the last 25 years the Yakimas have planted 82,000 spring chinook fingerlings in the river. All of this work was never protected. We want to see the river kept in its natural state. I'm opposed to drift boats coming down the river when the salmon are spawning. What we want is to see people protect the fish on their way to spawning grounds.
- 17. We'd like to see the county park cleaned up where the Indians use it.
- 18. Whites make messes along the river too.
- 19. Why isn't the Forest Service person who will make the decision up in front of us right now? Where's the big man? Where's the governor?
- 20. These meetings should be run under formal rules. I didn't hear anyone open the meeting with a gavel or call for Old Business or New Business. I attended the public meeting for the upper Klickitat, was told I'd get the minutes from that meeting and have never received them. I've owned my land on the lower Klickitat for 26 years and still can't find out where exactly it is because the land surveys all change over time. Here are maps of my boundary line and a hiatus survey and the deed from the courthouse, registered in 1861. Changes in these aren't reflected by any federal or other surveys. They should have to say what survey is being used. We're trying to save the Klickitat, but for what? How are we going to save it by increasing recreation access? People have shot geese on my property. With increased access we'll have more litter and other problems. The Forest Service said it could do land trades. What kind of money is being proposed by the Forest Service for easements? I've taken BPA to court 4 times over the past 15 years and have won them all but am getting tired of dealing with the federal government. The Forest Service hasn't come around to talk to me about purchasing easements—they want my land for nothing.
- 21. We own our land; how is someone else going to manage it? And what do we mean by management? Is this a dictatorship or by mutual agreement?

Each alternative has a different definition of how management would be approached.

- 22. The Forest Service said earlier tonight that Alternative 1 may not fly, so aren't we really looking at just three alternatives? This whole process should be declared void.
- 23. What we need is alternative that would do less than Alternative 1; then maybe #1 would fly.
- 24. Land along the lower Klickitat is also included as General Management Area under the Columbia River Gorge National Scenic Area Act. If there's money for acquisition as part of Klickitat river management, would the portion within the Scenic Area be included?

Alternative 2 has just a little money for acquisition; Alternative 3 has more and #4 has the most. We can't guarantee that this money would be available; the Forest Service makes that decision.

25. My concern is that land could be taken without compensation; nobody's property rights should be taken away without compensation. The Gorge Scenic Area is being clearcut while landowners can't cut a tree down. What will the effect be on timber harvest? There are threats to water quality from cutting on steep slopes even if the trees are away from the river. I'd like to see this addressed.

Alternatives 3 and 4 would work with landowners to reduce impacts of timber harvest on river resources, including the possibility of buying some timber rights. The proposed ban on building roads on very steep slopes within the river corridor would apply whether the purpose of the road was to cut timber or for other purposes.

- 26. This whole act is a contradiction; you're taking away our land so the public can use it. This won't preserve water quality or vegetation. I take care of the river and plant vegetation. This whole thing is ridiculous.
- 27. I agree with this, but I sell real estate and some people come in and buy land not to live on it themselves but just to put houses on it and sell it to people from Seattle or California. I don't want to see overuse either.
- 28. Could you explain some of the ways the river is already protected, such as the existing Shorelines Master Plan and the state's Forest Practices Act?

The current Shorelines Plan says that houses must be set back at least 100 feet from the river. Within 50 feet of the river, the only timber harvest allowed is a one-time cut of no more than 30 percent of the trees. From there out to the edge of the 200-foot (on each side of the river) shorelines area, 30 percent of the trees can be cut every ten years.

- 29. The county's Shorelines Plan has protection already built into it and has provided very good protection to date.
- 30. I have an open mind, and I'm the landowner who owns the footbridge you talked about in the draft EIS. Because I have an open mind I wanted to think about what possible good could come about. But I didn't even get one of your EISs in the mail, so I couldn't even have an opinion and I've lost any respect for you. Now I know what EIS means—each individual sucks. I feel threatened by your proposals. Now my freedom is threatened. I'm your worst nightmare. I don't mind paying taxes; my freedom is worth it. I'm paying a lot to speak at meetings like this. I lived 16 years in a cabin without electricity; I had to hike miles in to it, and climb 500 vertical feet. You'll have to kill me before I'll accept your proposals. If you want to manage land, go manage land in Kuwait. You want to use

my footbridge for public access and I'm the last to hear about it

The footbridge was mentioned because it's there now; no alternative suggested using it to provide public access.

- 31. I have several questions. We have the EPA already looking out for water quality; why do we need another layer of bureaucracy. I also want to know what would happen to our taxes. How much tax money would be taken away from the county? Roads and other services would still have to be maintained.
- 32. I've lived and worked in the gorge for the last 60 years. It still looks pretty good, although the federal government isn't helping it any. The Forest Service has a role in Alternative 2, as well as in #3 and #4. Why can't we manage our own property? I have 13 acres. The highway department wanted to take some my property for a ditch along the road. All this boils down to the fact that government is involved. There should be as many citizens as bureaucrats on these management committees. The revolutionary war was fought because of taxation without representation; that's what this looks like to me.

Alternative 2 emphasizes landowner stewardship.

- 33. Alternative 2 has Forest Service oversight, so it would have the ultimate control.
- 34. The 5th amendment guarantees the right to own private property, which means we can control it.
- 35. We have 600 acres and lease additional land three miles upriver. A main concern—aside from the instant designation of the river—is the boundaries. Art Dufault said that a 1/4 mile boundary would be used, and the Wild and Scenic Rivers Act specifies that 320 acres per mile of river is the maximum, so why are the boundaries larger than this? Visuals is not a good reason because part of the area within the boundaries can't be seen from the river at all. Now Steve Mellor has said it will take an act of congress to change the boundaries. Unlike it says in the draft EIS, the boundaries are an issue to everyone here, and they all are involved. This is a draft EIS, so we can still change the boundaries; I'd like to see them be no more than the 200foot shorelines area. You can't convince me that most of the focus is on the waterway and shorelines area with the corridor as wide as it is. The EIS summary says this is discussed below; I couldn't find where. Why is the footbridge discussed when it's on private land and for private use? The agendas for Gorge Commission meetings include hearings on agricultural structure additions. These are reasonable 60 and 80 acre parcels. We see words such as "encourage" too much; these are just too generic. I feel pressure here. Existing regulations are adequate. Forest Service oversight sounds too much like the Gorge Commission; the bottom line is that we'll be stuck with the same management as the Gorge Scenic Area. This is

unconstitutional and unethical—an outlandish violation of rights.

36. Is the 1/4 mile corridor being taken away? can we do what we want on our land, or does the Forest Service have the final say? Who has the control? How can the county pay for increased management when it doesn't have adequate funds already? And who pays the people who are telling us what to do—where is this money coming from?

37. From taxpayers, that's who.

Under Alternative 2, the state and federal government pay increased costs, and the federal government under #3 and #4, so it does come from taxes.

38. Any of the alternatives would lower the resale value of our property.

Some research has shown that property values can increase along Wild and Scenic rivers.

39. If the footbridge talked about earlier can be made into public access, what can be done to make your property public access?

None of the alternatives call for this. We'll make sure that the final EIS says that the bridge is for private use only.

40. Could the Forest Service guarantee that you won't open up the footbridge to public use?

That could be built into the preferred alternative.

- 41. The county already has enough regulations to manage resources. Another layer of bureaucracy is not needed.
- 42. Will there be another public meeting? This is the first meeting I ever heard about.

There will be a Task Force neeting for the group to attempt to reach consensus on a preferred alternative before the final EIS is published. (A Task Force member in attendance subsequently offered to let people know when that meeting would take place. A sheet was passed around later so people could let the Task Force member know if they were interested in hearing about the meeting.)

- 43. At the meeting on the upper Klickitat, we asked what river management plans have to do with the constitution, and were told "nothing." This sounds like our rights are being taken away. If the constitution were being followed, we wouldn't be here.
- 44. The county commissioners are on record as saying that the river has been managed well by the county and its residents. We know this because we wouldn't be here otherwise. The commissioners want narrow boundaries, between 50 and 200

feet, and are opposed to anything beyond 200 feet. The commissioners support state designation, which would rely on the county and its residents to manage the river. The county has enough bureaucrats now. There is only one river in the state system. We've talked to people who live along that river (the Skykomish) and they are pleased; the system works fine there.

45. I'm sensing dissatisfaction with this process. We've been subject to the Scenic Area Act for 4 years now. Lots of consultants have been hired to run public meetings. The Forest Service has boxes of letters against the Gorge Act. Art Dufault is willing to pass the buck to his predecessor. You planners will be gone in a few years. Scenic beautification and other words sound good, but this is a Forest Service land grab. I have a problem with the Scenic Area mapping—they said come back and tell us about it in April of 1991 to resolve it. I see the same kinds of mapping problems here. Why aren't the people who are making the decisions here to be held accountable? Why is the local option already ruled out? This presumes locals are not capable of managing the land. I rail at that opinion. We have a score of citizen advisory groups in the Gorge and they don't mean a thing. Friends of the Columbia Gorge has a lawyer who attends all of the meetings; we were going to vote on something once and he said if we did, he would bring in 1,300 proxy votes for his membership. The Commission later voted not to conduct any straw polls. This will really be bad. If we don't like it, the response is "sue me" and the government has a lot more money to fight than we do. My neighbors' taxes went up three-fold; you'll lose your land one way or the other. What about the constitution? The head of the Gorge Commission, Dick Benner, says that there's no constitutional infringement because we're allowed reasonable use of our land—with what's reasonable decided by the Gorge Commission. In Vail and other resort areas, employees can't even afford to live there because it's gotten so expensive—the employees have to be bussed in. Wild and Scenic designation is no different from the Gorge Act. The founding fathers said that government comes with consent of the governed.

The Gorge Act is very different from the Wild and Scenic Rivers Act.

- 46. Who has responsibility under both—the Secretary of Agriculture. It's not different, it's still the federal government telling us what we can and can't do.
- 47. Where do you live?

Is that relevant? I'm from Bountiful, Utah.

48. My relatives have been here as long as anyone. Land and Water Associates are just bringing this information to us. The Forest Service is really the ones who should be in front answering questions. They're the ones who count. We want to keep this area scenic, but within reason. None of us who live along the Klickitat want to defoliate it. Alternative 1 is bad enough. I'll go along with what the county wants; we can vote

out the commissioners if we want. We can't vote out the Forest Service or Land and Water.

- 49. We don't own property along the Klickitat but we do live in the Gorge and see what you're doing to the Klickitat just what's been done in the Gorge. It's unconstitutional. When the government starts paying taxes on our land for us and starts keeping the place up, then it can tell us what to do.
- 50. I know of a situation where children cannot inherit their grandfather's land along the Columbia Gorge. I don't want to see this happen along the Klickitat. Our neighbors on the Klickitat can take care of the river. A few years ago, the state ble w out a falls so that more fish could get upstream. Instead of improving things, the state destroyed one of the biggest runs on the Klickitat. When the neighbors are taking care of the river, the state or federal government should not take it away. When I bought 80 acres of land, the county did not even have a map of it; even if you have a deed or title no one can show you where the corner stakes of the property are. Let's all get together and say we are managing the river.
- 51. Under "Cost and Implementation" in the discussion of key issues, it says that the Forest Service could use its management authority if Alternative 2 is not working, and in that case the impacts would resemble those under Alternative 4. This means we only have 2 alternatives, not 4.
- 52. If we don't vote on this, then we have <u>no</u> alternatives. This is a waste of time. The Regional Forester doesn't care what we say. It's up to one individual, which is totally unconstitutional.
- 53. Why don't we have a vote.
- 54. Before we vote remember that the town of Klickitat doesn't have a vote because they're not here. This is being slipped through; what do you propose to do about the town of Klickitat?

The meeting tonight is about the lower Klickitat, but it's true that Alternative 2 in the upper and lower Klickitat documents calls for addition of both reaches—and the stretch in between—to the state system. The federal government would not have authority above the town of Pitt. All Congress can decide is whether or not the upper Klickitat is added to the National Wild and Scenic Rivers System. Before anything done by the state would happen, people who live in the Town of Klickitat would have chance to become involved.

55. If we can't vote, how were the alternatives made up? Why does it matter when our views won't be considered anyway?

Your views will be considered; that's why we're here tonight. We take the public comment process seriously and will send the notes from tonight's meeting to anyone who requests it. 56. Will there be an appeals process?

There always is in America.

- 57. It's really not an appeals process if it costs so much money to successfully appeal a decision. You can't say it just costs 25 cents, the price of mailing a letter. In the Gorge, only 4 out of 80 appeals were successful.
- 58. Both the Gorge Commission and the Forest Service are federal control. It's nice to say that measures are voluntary, but they're about as voluntary as paying taxes.
- 59. It's clear that there's lots of animosity toward the federal government here—it's tough for you to take the heat for it. We appreciate your being here.
- 60. When you go back 60 years, the federal government are the ones who screwed up the Columbia river in the first place, with all the dams and other activities.
- 61. Why won't people talk to us eyeball to eyeball? Do you make it a point to involve landowners? We do have mailboxes you could send things to, such as questionnaires.
- 62. (After the meeting, it was requested that the minutes be modified to add the fact that Steelhead Run, just below Pitt, is a legal subdivision with restrictions for 800 square-foot-and-up properties; the auditors file number is 159611, filed in Klickitat County on January 27, 1977).

Written Comments Received on Draft EIS

J631,159C

TO: US FOREST SERVICE/ COLUMBIA RIVER GORGE NATIONAL SCENIC AREA OFFICE

REPRESENTATIVE FOR THE UNIVERSITY KAYAK CLUB, SEATTLE WA. RE: ENVIRONMENTAL IMPACT STATEMENTS FOR THE WHITE SALMON AND KLICKITAT RIVERS FROM: JOHN E. HOKANSON,

Dear Sir or Madame:

i am representing a kayak club of greater than 100 members of University of Washington students, faculty and staff.

The University Kayak Club strongly supports the maintenance of the natural character of rivers and other waterways, while providing access for percentional use, We recognize that in order to maintain the natural beauty and resources of a river, restrictions on use may be necessary, following these general principles we support the following proposals.

LOMEN WHITE SALMON WAITOWAL SCENIC RIVER, Alternative 3. Nanagement of the Lower white Salman River maken the Will and Scenic Rivers At this He provising a samel increase in accessibility of the river. A buffer of land on both sides of the river is essential to maintain the existing character of the opriver. Recogniting private interests in the rurel communities of Husan and RS Control, we would not opriver some expansion of researched that unrestricted commercial raft usage of the river would not rate which would have the character of the river. We feel that a permit system for commercial trips may be necessary to control the volume of usage on the river.

UPPER WHITE SALMON RIVER, Alternative 3. We strongly support including the Upper White Salmon to the National Wild and Scenic Rivers System.

LOWER KLICKITAT NATIONAL RECREATION RIVER, Alternative 3.

UPPER KLICKITAT RIVER, Alternative 4. We support the inclusion of the Upper Klickitat River to the National Wild and Scenic River's System, and their feet feedled control of the management of the river is assential to insure the interests of all citizens are realized. To improve the recreational entering of the Upper Klickitat, public access to the river at the Takima Reservation boundary, or within the reseveration boundary, or within the reseveration.

Thank you for considering our point of view.

Alexander in Sincerely,

2311 NE 103-5 CT. John E. Hokanson

Switte WA 95-25

HEADQUARTERS UNITED STATES AIR FORCE DEPARTMENT OF THE AIR FORCE WASHINGTON, D.C. 20330 28 August 1990

Mr. Arthur W. DuFault

Columbia River Gorge National Scenic Area 902 Wasco, Suite 200 Hood River, OR 97031

Steve Mellor and Telephonic Discussion between Mr. Steve Mell Major Shiell August 17, 1990 concerning: Lower White Salmon River Management Plan Upper White Salmon River Study Lower Klickitat River Management Plan

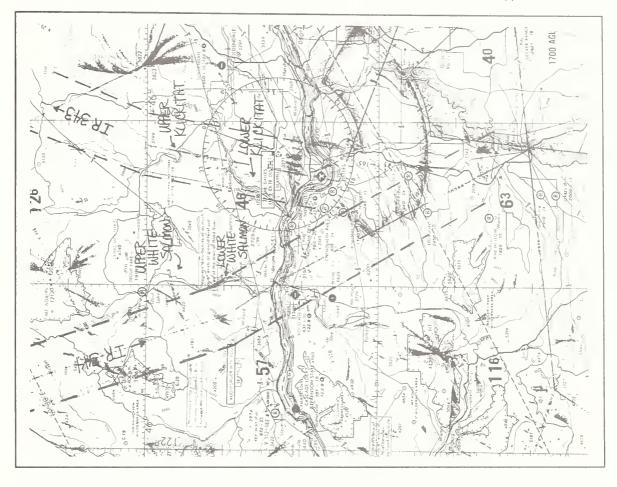
Upper Klickitat River Study

Dear Mr. DuFault:

My office recently recieved your Draft Environmental Impact Statements for the Upper and Lower White Salmon and Upper and Lower Enrickitat National Wild and Scenic River Management Plan. We appreciate the opportunity to review and respond to these

Planning Office. Our charter includes managing, directing and providing the Air Force guidance with respect to the National Environmental Policy Act (NEPA) of 1969. Compilance with NEPA while balancing mission readiness and protecting the environment are our primary concerns. A key to developing and maintaining My office is part of the Headquarters Air Force Environmental Planning Office. Our charter includes managing, directing and mission readiness is airspace.

intricacies of aviation and maintain the flying proficiency levels of our more experienced aircrews. This proficiency flying is required to maintain the levels of competence required by our world-wide mission. The maintain the proficiency of our aircrews in low level tactics, all military services conduct low altitude Airspace, training areas, and ranges are critical to developing and sustaining mission readiness for the United States Air Force. The Air Force uses these areas to train new aircrew members in the training flights. The training routes selected for these flights are chosen to simulate realistic combat environments. To minimize the impact of these low altitude operations, and to enhance the safety of low flying operations, the routes and areas selected for these flights are carefully chosen. The areas are selected to avoid, as much as possible, airspace near controlled and uncontrolled airports, other hazards to aviation, and populated areas. Every effort is made to help ensure the safety of our pilots as well as reduce hazards and disturbances to the public. Miltary flight operations in these areas are flown in accordance with criteria developed jointly by the Department of Defense and the Federal Aviation Administration.



With respect to the Upper and Lower White Salmon River Draft EIS's, there is one Miliary Training Route (MTR) which should be addressed in the documents. This MTR is Instrument Route (IR) 344, controlled by the Navy's COMMATVAONING PAC, Naval Air Station Whitby Island, Washington. The route centerline crosses near the rown of Bingen, Washington, roughly from North to South. The route corridor is four (4) miles from either side of this centerline and has a minimum altitude of 500 feet above the ground.

IR 343 is located near the Upper and Lower Klickitat River proposals. The centerline of IR 343, also controlled by Whitby Island Naval Air Station, crosses near the town of Klickitat, Washington, roughly from South to North. The corridor for this route is four (4) miles from either side of the centerline. The minimum altitude of this MTR is 6,000 feet above mean sea level, which is approximately 3,000 feet above the ground in this area.

The military training routes over the Lower and Upper White Salmon and the Upper and Lower Klickitat Rivers are a part of the existing alrepace in the region of the proposed action, and constitute a portion of the affected environment. As a result, these airspaces should be addressed in the environmental analysis for the proposals. The early coordination of your proposals with the affected military services, and regional representatives of the Rederal Aviation Administration could resolve potential conflicts pending designation of wild and scenic rivers and the existing airspace structure near the proposals.

Again, I appreciate the opportunity to reply to your document. Any information you desire with regards airspace and airspace concerns, feel free to contact my office: AF/LEEV-P, Environmental Planning Office, Pentagon, Washington, DC 20330, Telephone (202) 695-8197.



Aug. 29, 1990

U.S.D.A. Forest Service Columbia River Gorge National Scenic Area 902 Wasco Avenue, OR 97031

Responsible Official, John F. Butruille

I am a resident and property owner at the three mile post on the lower Klickitat river. I have been opposed to the congressional designation of the lower Klickitat into the Wild and Scenic Rivers System without first conducting a study as is being done on the upper White Salmon and Klickitat rivers.

က

N

Now that the draft EIS has been discretely circulated by the USFS I am appalled at the unreasonable boundaries of the river corridor. These boundaries show no logic in that they go far beyond the view shed both from the river to the hillsides and from the associated landscaped to the river.

Klickitat County has a shorelines management plan that has very stringent development guidelines. This management plan protects the river corridor for 200 feet from the normal high water mark on both sides. It preserves a 50 foot natural buffer on the river and all contributing waterways. Adding the federal government to this list of watch dogs is a severe case of overkill.

4

Included in the DEIS is a list of four alternatives. I would encourage whatever agencies that will be making our decisions for us to choose Alternative I. I also feel that a river corridor of 200 feet would be much more suitable to the terrain and the personal rights of the residents and property owners involved by this management plan.

က

Sincerely

Daniel T. Chase

Home There

3610 NE 67th Portland, OR 97213 (503) 284-2209 August 31, 1990

Dear Steve Mellor and Forest Service work group:

I would like to express my preferences on the Lower Klickitat Draft LELS alternatives.

As a whole, Alternative 3 looked best to me. I'd like to explain some of the reasons, and also some of my concerns about that alternative.

Alternative 1, 1 believe, fails to provide adequate safeguards for the resource as a whole. Some key elements that alternative 1 doesn't provide are: protection against residential development to the extent that could change the character of the corridor, safety for boaters and dipment fishermen, and long-term access to traditional river access points. It seems to me that the county resources are already stretched, for example, in the search—and-rescue area. Any increases in recreational use, as would happen as the nearby metropolitan areas grow, will overrun the county's ability to respond. The need for clearly identified public access point to the river is, in believe, necessary in order to head off future conflicts. I'd like to see stronger protection for the river resources.

Alternative 2 does add some protections for the resourcea, but not at the levels I would like to see. It does provide for public access to the rivers, and coordinated recreation planning and management, which could help mitigate impacts of recreation. I am concerned at the projection that landowner's resals value may be affected if they donate conservation desements. This would seem to me a deterrent to the program, maybe so much a one as to render it ineffectual. I am also concerned that there seems to be no provision for compensation to these landowners. If any decreases in timber harvest or agriculture would be voluntary, does this mean that there are no restrictions to protect identified river values? I am very concerned about the possibility, with population pressures, of subdivision of the lands in this are. I think land-owners should be protected by zoning, and compensated for loss of value if this occurs. One of my major concerns is rising property values, and the possibility of people being taxed out of that homes if protections are not in place for them. This is especially a concern on the lower river, nearer to areas that are already growing.

9 1

œ

6

ıo

Adding this stretch of river to the state scenic waterways system only makes sense if the upper stretch is added, and that was nor my first choice of management for the upper stretch. The state system seems weak because of the inability of the state to add more rivers to the system. At this point, the state Scenic Waterways system would add little more than a coordinating mechanism for the river. The state and federal systems seem incompatable with

respect to condemnation authority. The county's support of the state system is in its favor. I understand and favor the deaire to keep the river management at a local level, which is why I support alternative 3 with a management committee. Alternative 2 provides less compensation for landowners, focussing on donation of conservation easements. If the county is concerned about adequate compensation, alternative 3 makes better provision for this.

10 -12 alternative 3 are: management by a committee, which includes the Yakima Indian Nation, the possible future purchase of water for instream flows, requiring natural methods of bank stabilization, the undisturbed river buffer, the SAR team, federal funding for recreation planning, purchase of access sites or easements, and funding to assist landowners with fencing and cartle control. I question the need to reduce the rural residential area at the north end of know how large the rural residential area is. I think we do have to allow for Alternative 3 is my choice. The stated goal, to maintain the river resources and character much as they are today, is whist I desire for the river, and I believe that positive actions are needed to accomplish this. I believe that purchase of 50 acres of easements to protect rare plants and 200 acres to retain visual qualities, funding and technical assistance for Native American alternative 3's approach to have no reduction in grazing, as this is what gives the area its agricultural base. The main weakness of alternative 3, as protection under this alternative is reasonable. Key elements that I favor in acquisition costs mentioned in this alternative are very high, and the annual the cooperative management provided for by this alternative is the ideal way to manage a resource that affects so many people. I think that the level of the corridor to the size of the existing community at Pitt, because I don't operating costs are almost as high as alternative 4. Could this be reduced somewhat, and still maintain the goals put forth in alternative 3? landowners should be compensated for easements and loss of value. I favor some growth within the river corridor, and to encourage it within those communities already established. Alternative 3 provides for better compensation to landowners than alternative 2, and I feel strongly that I see it, is the lack of county support. I am also concerned that the

Alternative 4 seems to me like overkill and unnecessary spending. It was not within the wishes of anyone on the task force to significantly expand recreational opportunities, just ease congestion, crowding, and impacts particularly to private land-owners. I agree with the task force position, as explained on p. 2-3.

Some specific provisions that I would like to discuss:
I would prefer signing to a brochure addressing resource protection.
When we developed the alternatives, no one was in favor of a brochure. I think the info mentioned in alternative 2, p. 2-18 could be included on a

I am opposed to prohibiting boating in the gorge area. The implication, that two uses of the river are incompatable, seems erroneous to me, and I am generally opposed to unneccessary prohibitions. The wild and scenic directive specifically states "without...limiting other uses that do not substantially interfere with public use and enjoyment of these values." I think this means that boating should not be prohibited unless it is really necessary. To all practical purposes, the difficulty of the whitewater in that ecciton will effectively prohibit all but a few boaters. In my opinion, the class ly

14

estimate given in the draft EIS was very conservative, one drop at least being a class VI (You might talk about running it as long as you don't have your boat with you.) To avoid conflicts, you might require the boater to file a plan with the forest service, including; dipract avoidance (perhaps boating at the channe one is fighth) and a affer when.

a time when no one is fishing), and a safety plan.

I agree strongly with the recommendation that there be no regulations on noncommercial use of the river until management action is called for by undesirable impacts. I am very much concerned that the Forest Service may have a leaning towards permit plans, and I oppose those strongly. There is a long history of rivers in the east where only commercial outfitters are permitted. I see no reason to ever permit private boaters on the Klickitat.

15

16

With respect to condemnation, I think it interesting that the process has been used in the past to establish fair market value of a property. Where this is the case, couldn't a new term be used to more accurately reflect the process, rather than carrying the dire connotations of "condemnation"! If the process hasn't been used in the last ten years, I don't find the power of condemnation particularly frightening. However, I am not a land owner in the area. I could only support its use as a last resort, and after a revaluation of the goals for the river.

evaluation of the goals for the truet.

I disagree with the statement that the county will experience negligable growth through the end of the century. We are experiencing a major influx of population in the Portland area, especially of people from out of state purchasing retirement homes. Property values in the past year have increased tremendously, and the same is happening in tural communities in the area. I would expect this in the near future to extend along the Columbia River, and

17

In summary, I support Alternative 3. Because of the excellent stewardship of the lands, I would choose alternative 2 management, with alternative 3 goals, as a second choice.

200

Sincerely,

Taken Lewis

Karen Lewis

cc. Jan Stuart

13



STATE OF WASHINGTON

WASHINGTON STATE PARKS AND RECREATION COMMISSION

7150 Cleanwater Lane AY-11 • Olympia, Washington 98504-5711 • (206) 753-5755

September 6, 1990

Area Manager

Columbia River Gorge National Scenic Area Attn: Lower White Salmon River Management Plan 902 Wasco, Suite 200

Pear Sir:

Hood River, OR 97031

In response to the management studies for the Klickitat and White Salmon Rivers, I am expressing the position of the Mashington State Parks and Recreation Commission) and the Committee of Participating Agencies (Committee), which includes Washington State Departments of Natural Resources, Ecology, Fisheries, Wildlife, Interagency Committee for Outdoor Recreation, Transportation, Association of Mashington Cities, Washington Association of Counties and two private sector members. I want to make a single response representing these agencies to all four draft documents.

The State Scenic Rivers Program is a cooperative river management program in which the legislature designates rivers of significance, which mandates state policy to prohibit dams and impoundments and begin a cooperative local and state management plan. Designated state Scenic Rivers become part of the state Hydropower Plan submitted to the Federal Energy Regulatory Commission and requests, prohibition of dams or impoundments on designated

Both Klickitat and White Salmon Rivers are recognized as significant free-flowing rivers and this state program and tis committee will support Senic River designation to the legislature upon local legislator(s) request. If the legislature acts in support of this designation, a River Council is set up to begin the management process. The River Council includes representatives from effected state agencies, local jurisdictions in the river area and a local citizen and landowner advisory board. For the management of the rivers, federal funding is requested and federal action to prohibit dams or impoundents.

For the Klickitat River, we recommend state Scenic River designation from Summit Creek to the Columbia River for contiguous management. To further clarify the state's role in management; the State Scenic Rivers Program is mandated by law (RCW 79.72) to protect private property rights and shall not

19

Area Manager Columbia River Gorge National Scenic Area Page Two condemn any private lands. Shoreline management or county zoning may be affected if an approved plan recommends changes, but only after agreement of counties and Wahington State Department of Ecology through approved amendment processes.

The law designated a maximum of one-quarter mile width on either side of the river for management of <u>public</u> lands and public resources. Actual management corridor is determined through public hearings and may be less. State Parks will work cooperatively with federal agencies within the management boundaries and should management areas coincide, the State Scenic Rivers Program will work with federal managers to form a cooperative approach to management.

20

The procedure for state scenic designation would begin with a formal request of the task force, county commissioners or legislators to the Commission Adoption by the Commission would place the river in a bill request to the legislature. Passage of the bill is dependent on the approval of the legislature and governor. We would request cooperative financial support for management of these rivers if the federal studies recommend state management over federal.

21

Your task force and your staff deserve high regards for the quality of these studies and the thoroughness of the recommendations. The State Scenic Rivers Program would want to work closely with the members of this planning team if they do in fact become part of the system.

22

Thank you for the opportunity to review and comment.

Steven of Statuer 4

Steven A. Starlund, Manager Scenic Rivers Program

bh cc: Committee of Participating Agencies

Ġ

September 8, 1990 1501 K Street Washougal, WA 98671

Area Manager Solumbia River Gorge National Scenic Area Attn: Lower Klickitat River Management Plan 902 Wasco, Suite 200

Dear Sir:

Hood River, OR 97031

Here are my comments on the DEIS for the Lower Klickitat National Wild and Scenic River Management Plan.

I have become famillar with the lower Klickitat mainly by my occasional travels through the area. The scenic, and relatively natural, character of the Klickitat is both beautiful and unique. I feel that visual qualities should be substantially retained. More people sbould have the opportunity to learn about and enjoy this river, and improved river access and facilities are needed.

Native American use of the area, for dip-net fishing and other traditional activities, is another unique characteristic that should be maintained and enhanced.

An issue I feel strongly about, and one that I feel is most important, is biological diversity. I believe that it is essential to maintain and enhance wildlife habitat. Such a river area as the lower Klickitat provides support for many species of plants and animals, support that cannot be obtained anywhere else. We all have a responsibility to maintain these ecosystems

Based on these factors, I believe that Alternative 3 is the best Management Plan. Clearly set goals for improvement and stronger regulations are needed to maintain and enbance the quality of the Lower Kilckitat.

as best we can.

23

Thank you for this opportunity to comment.

Muhand M. Sino Sincerely,

Richard M. Sisson

TRUCKININT Lower Klickitat River Management Alternatives Federa

	1						
Atternative 4	The contract of the second of	Sam	Commence of the second	ourshood of the polynomial of	redeal number of 10 contions at 10 contions and 10 contions at 10	procedurities by a second seco	\$2.649.000 plus \$120,000/year
Atternative 3	Conditions in the align countries in the alig		About managed by Kilckhet County. Washintown U.S. Fornest Koning, and County County County and County County and County group.	County Stranghans Inclusion and County Strangham Sed but Strangham Onlighter Free moniforing Free n	Pichibican on building transfer or wards on way steeps slopes, limited to every to building the manufacture or entering the properties of	S men to rotestance	\$1.234.250 plus \$105,000/year
Alternative 2	Enhance existing resource protection mechanisms in the river confidor through increased coordination and enforcement	River from Summit Creek to mouth would be added to State Scenic Rivers System	Hiver is managed by the State Scenic Rivers Program, Scenic River Council and citizen advisory group established.	Por dam protection from the company of the company	Politics of the politics of th	Maintain existing recreation opportunities, provide limited improvements at existing sites; monitoring of recreation use and impacts	\$331,000 plus \$70,000/year
Atternative 1	Mainten programmer pro	Piver vas	Pun Luciano Di A	Existing mechanisms include revised county, shorelines Plan and programs; and programs prohibitish by federal designation	Existing resource protection mechanisms include Forest Practices Act and county zoning ordinance	Fract Softwaren	Existing costs
	Intent	Designation	Management Structure	Instream and Shoreline Resourc. Protection Measures	Upland Resource Protection Messures	Recreation	Cost

Charles T. W. 150.

955 HW 142 Jul. W@ 98635 Jul. 13, 1990

ara Manager Colembra Buir Longe National demicano 903 Wasso Culma Hoad Ruir, allegan 97031

Rear Lev.

The letter is in regard to the hower the house there is the forward begins the took the country sealing that the start and other people on the lost who have a reducent their their their last begins and material their politican! their their tending the contact and to do.

ete min clear & nort to key the min clear & noticed registation on the nive would ague son teur.

Xxx 100.986359112

Haran Dathaway

955 HWY142

The management program that is crethered in the book goes heyerd all reason. The people when he has and own the land

dong this me how soon a reach reached for or the perfections and eminimates in the services of the rows and in the services of the sound that the war they can the plant and that he services in the plant of that to her a steer the man to the plant in the long the men to be plant in the long and or services in the plant of in the long the men to be plant in the long the men to be plant in the long the services of the plant in the long the services of the plant in the long the services of the plant of the plan

"O WHOM IT MAY CONCURA.

You have not yet given an adequate explanation of w hat is meant by "managing" the confiscated area along the Klickitat River.

25 Nature "genages" very well in periodically scouring out islands, and building new ones with the flood warers. I think the channel, changing it, changing the shoreline, taking out you are not going to manage that.

Also, in your Lower Klickitat River Book your map number 3-3 you have so much area called "open Space". Between mile 6.8 and That is not open space. Recreationists looking for a place to 7.5 there are ten (10) dwellings and fences all along there. camp might think "Open spare. I can camp there:" They may not in my front yard.

26

Sincerely,

· Duthun (3,500

Edn- Whittum

696 Highway 142 Lyle, WA.98635

September 16, 1990

Columbia River Gorge National Scenic Area U.S.D.A Forest Service Hook River, OR 97031 Wasco Avenue

Dear Mr. Mellor

act of Congress. At that same meeting the Klickitat County Commissioners made a formal statement that they did not approve, and would not support this management plan under alternatives 3 and 4. They would support the Klickitat river Among my many objections to the designation of the Lower Klickitat river into the National Wilâ and Scenic Rivers system, is my objection to the excessive corridor boundaries. The Act limits the area under the management plan mile, creating a river corridor of unjustifiable widths. Although Congress approved these boundaries in 1988, they are "still subject to change based on new information or analysis" [Lover Klickitat DEIS, p.1-6). At the meeting held in Lyle on Sept. 5 the majority of property owners unanimously objected, not only to the excessive twindaries, but to the financial and psychological violations that this management plan vill impose on them and their families. This alone, should be sufficient new information and analysis to bring these boundaries back to a realistic and workable corridor, even if it does take an to 320 acres per river mile. This limit is exceeded by 100 acres per river being included in the State Scenic River System only.

27

27 woners in making alternative I as the course of management taken by the federal government in this matter, and bring the corridor boundaries to 200 feet from the normal high water mark on both banks to be compatible with the Klickitat County The State of Washington and Klickitat County have a Shorelines Management PLan that is more than adequate to protect our rivers and their contributing streams. I encourage you to respect this plan and the rights of the property

The CRGNSA is fast becoming a legal and moral mess. It is also a blatant violation of personal rights. It is imperative that this situation is prevented from happening on the Klickitas and White Salmon rivers now is t's planning stages. This can only be done by involving the property owners in more than the barest minimum required by law.

I trust this letter will be received and recorded as my formal objection to federal intervention on all Washington rivers.



David Kunz

Courthouse Annex 228 West Main, Room 150 Goldendale, WA 98620 (509) 773-5703

RECEIVED

MEMORANDUM

September 17, 1990

DATE:

TO:

Columbia River Corga SEP 18 1990

U.S. Forest Service

David Kunz, Planning Director FROM:

Lower Klickitat and White Salmon Wild and Scenic Rivers: Rivers Draft EIS' RE:

Due to time constraints and staff limitations, I could not detail my comments on the draft plans for both lower rivers. However, I offer these general comments:

The lower Klickitat Plan document has much more readability and the artistic style than the lower White Salmon document. If possible the lower Klickitat style should be adapted to the lower White Salmon Plan. Furthermore, the mapping style of lower Klickitat plan is superior to the lower White Salmon plan also had more detail (a benefit) but perhaps some of it could be addressed as an appendix to the final plan. 28 Within both plans, the discussion of the County Shorelines Plan should be revised to reflect the current standing.

be Within in both plans some areas previously subdivided may considered buildable under present county standards.

29

Within the lower White Salmon Plan the following particular concerns apply: Vicinity map facing p I-1: Please indicate that the area within the Yakima Indian Nation encompassing the Glenwood vicinity is presently considered disputed with regards to actual boundary line. p. II-5, 1st bullet under Alternative 1: Should indicate the county's minimum river frontage requirement for subdividing.

p. II-5, 4th bullet under Alternative 1: SEPA is also considered an effective primary control.

p. Il-22, Footnote 1: should read, "under the <u>Updated</u> Klickitat County Shorelines Master Plan.

p. III-54, Local Regulatory Authorities: Wild and Scenic River Overlay Zone is repealed; county is developing a draft Comprehensive Flood Plan which will influence uses along river.

The county has contracted with a consulting firm to update the Comprehensive Land Use Plan and Zoning. Consultant has begun even 20 acre or above parcelling, exempted by state platting laws must be evaluated by the county. A drawback is that the evaluation/ordinance does not regulate where the development p. III-55, One benefit of the Resource Lands District is that

p. III-56 SMP General Background: This section should reflect adoption of 1990 Update.

may occur, only how much and how often.



Klickitat County

Goldendale, Washington 98620 228 W. Main Street, Room 210

(509) 773-5810

Σ MENORANDU

September 17, 1990 DATE:

U.S. Forest Service TO: Bob Gorman, County Liaison/Task Force FROM:

Wild and Scenic Rivers: Lower Klickitat and White Salmon Rivers Draft EIS'

LOWER KLICKITAT RIVER DRAFT EIS

State Water Quality Standards

Act (FIFRA), is responsible for pesticide licensing and use regulations. State licensing, regulation, and complaints are the responsibility of the State Department of Agriculture as authorized by Revised Code of Washington RCW15.58 and 17.21 and Washington Administrative Code WAC 16-228-162, -164 and -166. This section is erroneous in describing pesticide (herbicide) regulations. The U.S. Environmental Protection Agency (EPA), as authorized by the Federal Insecticide, Fungicide and Rodenticide

LOWER WHITE SALMON RIVER DRAFT EIS

The Oregon White Oak community was not identified as an outstanding resource in evaluating the White Salmon River Management Plan. It is largely associated with xeric sites some distance from the river. It is not appropriate to tag this issue onto Wild and Scenic River Management. Oak Communities:

Chapter III Affected Environment Plan Communities - Oregon White

Threatened, Endangered and Sensitive Plant Species

While there are known to exist a number of State threatened, endangered and sensitive plant species in this area, it is imppropriate to list all the species that some unreferenced individual feels may be found. The unaware reviewer may surmise, erroneously, that the TES species exist here and just have not been

Biological Diversity

p. III-21, Table III-4

There is no description of the criteria used to define the components of land usage on the successional stage described. unreferenced work is very amateurized.

Unique Habitats

p. III-20

This section is presumptuous in referencing two federal sensitivantal species and their possible occupation of the triver corridor. Certainly the 2664 acres included in the most liberal river boundary could have been more carefully ground truthed for presence of sensitive species.

30

Recreation - Access and Facilities

p. III-30

This section only Vaguely addresses the need for public restrooms along the river. Without providing significant restroom facilities other than at BZ Corner, Husum and Northwestern Lake, the river will become contaminated with raw sewage from river users.

Chapter IV - Environmental Consequences

Alternate 2

. IV-2

There is a mention of "possible pesticide input" from agriculture/forestry use. If pesticide contamination is a concer the Washington State Department of Agriculture, State Department of Ecology or the U. S. Environmental Protection Agency should be notified. Sufficient and strict laws exist already that prohibit and regulat pesticide movement into surface and groundwater.

Alternative 3

. IV-3

The last paragraph addressed instream water withdrawals. All existing water uses should be honored through State ajudication of water rights. Then minimum stream flows should be established and monitored.

Cumulative Effects

IV-4

Many upland land use issues cannot and should not be addressed in this River Management Draft EIS. Residential development is one such upland issue. The Forest Service would, however, do well to promote and support development of community water and sewer in the Husum-BZ Corners area.

Effects on Plans and Animals

p. IV-8-11

This section is presumptuous and amateurish in both content and conclusions: Alternative, describes impacts on the Northwestern Pond Turtle which haven't been documented in the study area; Alternative 2 lists such wildlife as mountain lions not being able to survive in such a small acreage-mountain lions do not do well in rural suburban communities. Also in this alternative, ti fails to mention that most deer wintering occurs well outside the river

corridor (herds of several hundred); Alternative 5 describes ORV use but who would use an ORV to go where in a river canyon.

Cumulative Effects

[V-12

There is discussion of wildlife that require large acreages relative to the lower White Salmon River. These species have not likely inhabitated this area for over 100 years and are not likely to return to the rural, suburban environment. Winter range protection for deer can best be addressed by control of dogs and poaching.



Soil Conservation Service

West 316 Boone Avenue, Suite 450 Spokane, WA 99201-2348 Rock Pointe Tower It

September 13, 1990

DEIS: Lower Klickitat River Management Plan

SUBJECT:

ATTN: Lower Klickfat River Management Plan 902 Wasco, Suite 200 Hoou River, OR 97631 Columbia River Gorge National Scenic Agea Area Manager

Klickitat Conservation Districts which border the river. It also falls in line with traditional SCS working relationships with private landowners and We find that Alternative 2 encourages a voluntary approach by private landowners to maintain the scenic and recreational values of the Klickitat River. This follows closely with the goals of the Underwood and Central

31 are mentioned as ways for landowners to make resource base improvements. ACP Funds may be available with CS assistance is available when: (1) Producers request SCS assistance; and (2) when SCS staffing is sufficient to complete all high priority work (e.g., FSA) and complete planning for this project in a On page 4.4, part 4.3, technical and financial assistance from SCS and ASCs reasonable time

Alternative 2 is the most acceptable to SCS because of the voluntary approach to working with producers and other units of government on resource improvement.

32

Thank you for the opportunity to review this plan.

Bone a Langh & LYNN A. BROWN

James B. Newman, Director, ECS, Washington, DC Gary L. Tibke, State Resource Conservationist, Spokane Jerry Jacoby, Area Conservationist, Yakima



Decartment 1 Ag 1 re

ternational Corporation Champion Champion

Area Manager

September 17, 1990

Columbia River Gorge national Scenic Area 901 Wasco, Suite 200 To Whom it may Concern Hood River, OR 97031

International and Task Force member for the Klickitat River subgroup, Lower Klickitat River Management Plan. As a forester for Champion Please accept these remarks in regard to the Draft E.I.S. for the the study document is of particular interest to me.

activities (e.g. construction, logging, etc.), if not further controlled could lead to increased sechiment loads. In particular, the summary table "Impacts of the Alternatives on key Study Issues" seemed Creek, which is the single most important contributor to sedimentation in the Klickitat. In my judgement (and I believe that as a Forest Klickitat differs substantially from other west side rivers in that there is no significant degradation of its water quality due to forest Management activities. I doubt that this is likely to change given One comment is in regard to water quality. After reading certain unfortunate that there is no mention of the effects of Big Muddy portions of the report I was left with the impression that human Engineer I can speak with a reasonable degree of expertise), the to make "increases in sedimentation" a key issue. I find it ever increasing regulations.

33

In regard to alternatives, I can support Alternative 2. I would agree that increased coordination and enforcement of existing regulations are important needs. I also feel that the public's awareness of how we can be better stewards, can be improved through this alternative.

34

I am opposed to Alternatives 3 and 4 for the following reasons. Existing regulations are already in place to adequately protect the resource. I am against further federal control and intervention, thus eroding private rights. I believe that the local people have responsibility of conserving and protecting the resource, and they have a right to do so without being abused by a "removed" government. I further believe that this can be accomplished without the need for federal handouts.

Overall, I feel this is a well written draft. My compliments.

Sincerely

Nathan E. Putnam Procurement Forester Klickitat District

NEP/lds cc: J. Wehrman L. Rolph

LAND OPERATIONS

United States Department of the Interior

YAKIMA AGENCY

BUREAU OF INDIAN AFFAIRS

YAKIMA AGENCY P.O. BOX 632 TOPPENISH. WA 98948 -0632

CED 1.7

Area Manager Columbia River Gorge National Scenic Area OO Masco, Suite 200 Hood River, OR 97031 Attention: Lower Klickitat River Mgt. Plan

Dear Mr. DuFault:

We have reviewed the DEIS for the Lower Klickitat River management plan and have the following comments:

This agency recognizes the Fourteen Confederated Tribes and Bands of the Yakima Indian Nation as the only Indian Nation with treaty reserved rights and privileges 35 along the Klickitat River. The DEIS on many pages uses the term Native American in a rather generic fashion regarding treaty reserved rights and privileges along this river.

We would support the Yakima Indian Nation's position regarding a management plan for the affected portions of Klickitat River. However, we believe that more strict water quality and quantity controls must be incorporated into alternative one, if it is selected. We do not support the inclusion of that portion of Klickitat River from its confluence with Summit Creek to its confluence with the Little Klickitat River into the State Scenic Rivers System.

36

The Klickitat River originates within the Yakima's reservation, so please correct the misstatement in Section 3.1 on page 3-2 which states the origin is within the Goat Rocks Milderness. We also recommend changing a sentence to read in part: "...with falls and rapids where the fish as they struggled to climb upriver would be forced to follow...fishermen." in the first paragraph of box 3-4 on page 3-16.

37

We understand that caselaw, in addition to those cited in the DEIS, affirms and strengthens implied treaty reserved water rights off reservations. The Yakima Indian Nation's treaty reserved rights and privileges must be recognized in light of any management plan for Klickitat River.

Thank you for mailing this agency a copy of the DEIS and affording us an opportunity to send comments. Please mail this agency a copy of the FEIS.

Sincerely,

Superintendent



September 12, 1990

U.S.D.A. Forest Service Columbia River Gorge National Scenic Area 902 Wasco Avenue Hood River, OR 97031 Mr. Steve Mellor

Dear Mr. Mellor:

The Yakima Chapter of Northwest Steelhead & Salmon Council would like to comment on the Lower Klickitat River Wild and Scenic River Management Plan Draft Environmental Impact Statement,

which management alternative is selected. The management alternative that we would favor the most is alternative # 2. This would give the control to the state and local agencies. We feel this would Our major concerns are in the areas of water quality and ehoreline management for the protection of anadromoue fish. As long as the water quality is maintained or improved, we have no objections to give the landownere along the lower Klickitat a greater feeling of security in the management of their private property along that etretch of the river. It would also provide funding for shorelime and water quality monitoring programs.

39

We also suggest that in the future when undertaking a program of each vast importance that all affected land owners be informed by mail regarding any and all echeduled meetings. It is also important that all meetings be held in the affected area, We feel that direct communication would lead to better support and cooperation from the landownere,

40

Respectfully eubmitted Glenn R. Miller

Preeident

NORTHWEST STEELHEAD & SALMON COUNCIL OF TROUT UNLIMITED YAKIMA CHAPTER • P.O. BOX 10341 • YAKIMA, WASHINGTON 98909



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Fish and Wildlife Enhancement 2625 Parkmont Lane SW, Bldg B Olympia, Washington 98502 206/753~9440 FTS 434~9440

September 17, 1990

Arthur W. OuFault, Area Manager Columbia River Gorge National Scenic Area Attn: Lower Klickitat River Management Plan Hood River, Oregon 97031 902 Wasco, Suite 200

Lower Klickitat River — Wild and Scenic River Management Plan Oraft Environmental Impact Statement Re:

Oear Mr. OuFault:

the The U.S. Fish and Wildlife Service (Service) will be unable to review above referenced document. Eventually, the proposed project may be subject to permits for which the Service has review responsibilities. Accordingly, our comments do not preclude an additional and separate evaluation by the Service, pursuant to the Fish and wildlife Coordination Act (16 U.S.C. 661, $\underline{\text{et. Seg}}$), or other relevant statutes. In the review of projects, the Service may concur, with or without stipulations, or object to the proposed work, depending on specific development practices which may impact fish and wildlife resources. In the event that such permits do become necessary, we encourage the project sponsor to contact our office (above phone/address), prior to permit application, we may be $ab^{\dagger}e$ to give guidance on design criteria which will facilitate the permit-review process.

We acoreciate notification of this priject and the opportunity to comment.

Sincerely,

David C. Frederick Field Supervisor

997 fs



KLICKITAT COUNTY COMMISSIONERS

205 S. Columbus, Room 101 Goldendale, Washington 98620

September 14, 1990

Area Manager Columbia River Gorge National Scenic Area 902 Wasco, Suite 200 Hood River, OR 97031 Attention: Lower Klickitat River Management Plan

Dear Sirs:

This response to the Lower Klickitat River Wild & Scenic River Management Plan draft ELS is a reaffirmation of the Klickitat County Board of Commissioners position that the best management for this river is to have it managed as a Washington State Scenic River. The Board remains convinced that the U. S. Congress errored in having designated this river segment into the National Wild & Scenic River System. The five outstanding resources identified in this draft ELS are indisputable, however, the County, State and Yakima Indian Nation are more sensitive to these resources than any distant federal agency. These area governments were and remain better able to manage this river through State Scenic River designation.

4

The Board would welcome reversal of the federal designation but recognizes the improbability of such an action. The only tangible consequence of federal designation is the implicit prohibition of hydroelectric dams on this stretch of river. This Board has been and remains against any hydroelectric development on the Klickitat River, although none have been proposed.

An example of the error in designation of this river stretch into the National Wild & Scenic River System is the current boundaries. These boundaries were drawn up before the outstanding resources found on this river segment were identified. Consequently, the boundaries far exceed what is needed to protect these oustanding resources. Assuming that Congress will not reverse its designation of the lower river, the Board urges Congress to reduce the river boundaries to what is necessary for resource protection and no wider than 200 feet either side of the average high water mark.

Page 2 EIS Response The only reason for the existing wide boundaries are to protect upslope areas which have not been recognized as outstanding in this draft EIS. In recognition of the sensitivity of the upslope areas, this Board is willing to enact a policy against any new road construction on all lands along this river segment with slopes exceeding 40%. This is with the understanding that the excessively wide current boundaries are reduced.

43

The primary and outstanding resources are the river itself, its Mydrology and gorge, fish and it's Native American dip net fishermen. Water quality and quantity are essential for all these resources which must be protected from any water degradation. For this reason it

It is imperative that a series of water quality and quantity monitoring stations be established and maintained. Likewise, riparian vegetation, especially trees, should be maintained in favor of roadbed rip rap and ballast maintenance. The shading provided by riverbank trees is needed to prevent excessive transfer of terrestrial heat to river water.

44

A further concern regarding river use and water quality is the impact of motorized boating. This Board is strongly opposed to motorized watercraft above river mile 1.0. Above this point motorized watercraft should be prohibited to prevent deterioration of the stated outstanding resources.

45

If Congress upholds the National Wild & Scenic River designation, it should be a partner in Mashington States Scenic River Management of the entire river. The Yakima Indian Nation is encouraged to have that portion of the river in their jurisdiction, likewise, designated in the State River System to enable management of the river as one system. Federal involvement would best be directed towards willing seller acquisition of the land near the mouth of the river above Highway 14. On the west bank are 50 acres which would make an ideal location for a State Park and campground. One mile upstream on the east bank is a small five acre parcel adjoining the Countys' property which would provide a good day-use site.

46

47

48

The County Board of Commissioners for its part recognizes the value of the Klickitat River and welcomes its management as a Washington Scenic River and recognizes that such designation requires Anshington State legislative action and will work toward that end. Recommending the entire river for State Scenic River designation includes the unstudied middle portion between Pitt and the mouth of the Little Klickitat River. The Board is under advisement by the State Scenic River Condinator that before the river can be designated into the State System, it must be studied and a State River Management Plan

42

Page 3 EIS Response

adopted with full public response. This is the process that Congress should have followed before "instantaneously" designating the lower Klickitat River without first determining why or if it should be designated.

49

Sincerely,

BOARD OF COUNTY COMMISSIONERS ingtoy Klickitat County,

DeTos Reno, Commissioner

Spalding Chairman

Sverre Bakke, Commissioner

BCC/cmc

United States Environmental Protection Agency

Region 10 1200 Sixth Avenue Seattle WA 98101

Alaska Idaho Oregon Washington

SEPA

SEP 17 1330

WD-136

REPLY TO ATTN OF:

U.S.D.A. Forest Service Columbia River Gorge National Scenic Area 902 Wasco Avenue

Hood River, Oregon 97031

Dear Mr. Mellor:

River Management Plan. Our review was conducted in accordance with the National Environmental Impact Statement (EIS) for the Lower Kilckitat River Wild and Scenic The Environmental Protection Agency (EPA) has reviewed the Draft Legislative Environmental Policy Act and our responsibilities under Section 309 of the Clean Air This draft EIS evaluates four alternatives for managing the Lower Klickitat River since its 1986 designation as a Recreational river segment in the National Wild and Scenic Rivers System. The draft EIS presents a reasonable range of alternative management plans. The draft EIS has identified no adverse environmental effects from any of the alternatives. With the exception of the 'no action' alternative, all of the alternatives will result in beneficial effects to the physical, biological, social, and economic features of the river corridor.

Based on our review, we are rating this draft EIS LO (Lack of Objections). An explanation of the EPA rating system for draft EISs is enclosed for your reference. This rating and a summary of EPA's comments will be published in the <u>Federal</u>

We appreciate the opportunity to roviow this draft EIS. If you have any questions about our review comments, please contact Sally Brough in the Environmental Review Section at (206) 442-4012.

Sincerely,

Macd Griff
Ronald A. Lee, Chief
Environmental Evaluation Branch

Enclosure

Sept. (9,1990

LWHO LKLD

SIMMARY OF THE EPA RATING SYSTEM FOR DRAFT ENVIRONMENTAL IMPACT STATEMENTS; DEFINITIONS AND FOLLOW-UP ACTION

invironmental Impact of the Action

at a f Objection

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for happitation of mitigation measures that could be accomplished with no more than minor happicatory to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental inpacts that should be avoided in order to fully protect the environment, Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental inaget. EPA intends to work with the lead agency to reduce these impacts.

EG--Environmental Objections

The Educate has identified significant equivonmental masts that should be avoided in order to provide adequate protection for the environment. Corrective massured in order to provide adequate protection for the environment. Corrective of some other project internative in (find unding the notation alternative or a new laternative). Edy intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unastisfactory from the standpoint of public hash to revelvate our varientment and againty. BPA intends to work with the lead agency to reduce those impacts. If the potential unsatisfactory fingusts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Ade wacy of the Impact Statement

Category 1 -- Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft [1S does not contain sufficient information for EPA to fully assess everycomental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyzes, or discussion should be included in the final EIS.

Category 3--Inadequate

Ept done not believe that the dark Els adquirely assesses goteently significant environmental impacts of the action, or the Eph reviewer has identified may assistably anything anything a selection of the action of the selection of the protection of the protection of the content and anything any any selection of the protection of the protection of the content and the anything that the identificated administration of the protection of the content and the anything of the anything of the anything of the t

From EPN Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting

uary, 1987

Daniel Dance Los 102 Underwood, Wo. 98651 Manager: Columbia Rier Goge Not. Scenic Aproa 902 Wasco Ave. Hood River, OR. 97031

SIR:

After T believe the following:

Albernature two precises the only reasonable portions at the following:

Albernature two precises the only reasonable portions the 1st the only way to guarantee what if the bio-diversity, native farests and Wildle that the bio-diversity, native farests and Wildle was the manual when the viver eco-system will have any drance of surviving often the further.

Albertain two does not go far everygh in precisity a meager the wises of the operior.

I hove from one the region twice in the last year and it was expedify from much of the was expedify from much as the last was a will and seeming the ask of the west fetters of a wild and seeming the last in the right distribution.

the some applies for the flier elo-system.



United States Department of the Interior OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

SEP 1 7 1990 RECEIVED

Regional Forester

John F. Butruille, Regional Forester United States Forest Service Pacific Northwest Region P.O. Box 3890 Portland, Oregon 97208

Thank you for the opportunity to comment on the Lower Klickitat Wild and Scenic River Management Plan and Draft Environmental Impact Statement. Our comments follow. Dear Mr. Butruille:

Task Force that prepared the document will meet after public review and attempt to reach a consensus for the government action (page iv). With this approach, the public is not given an opportunity to understand what the government is proposing. The planning process and the environmental process are mixed, to the detriment of the document. The environmental statement should be based on a clear, federal, proposed action. CDD regulations, Section 1802.4(a) state "Magneries shall make sure the proposal which is the subject of an environmental impact statement (EIS) is properly defined. The National Poricy Act clearly stresses the identification of the proposal action, its detailed analysis, and the presentation of impacts of the proposal and the alternatives. The document states a preferred alternative is not identified but that the

20

Wild and Scenic River Values

We cannot determine potential impacts to wild and scenic river values for the Icaer Klickitat River for each of the anadgement plan alternatives based on this document. The document states that (page 1-5) the five outstanding resources identified are: the river's hydrology, anadromous fish, resident fish, the Native American dip-net fishing sites, and the goology of the gone between about RM 1.1 and RM 2.5. While the first four of these values are found analyzed somewhat under various other subheadings, analysis of the fifth value is missing. The Environmental Consequences Chapter should contain a subheading with analysis for imparts to wild and scenic river values.

51

RECEIVED

RECREATION/ERW

55

BIM Lands

shown on map 3-1 as non-federal lands. The NNJ/4NNJ/4, Sec. 25, T. 3 N, R. 12 E. NEJ/4MNJ/4, and SW/4MNJ/4, Sec. 33, T. 4 N., R. 13 E., are not Native American lands, but Bill lands to be managed by the USFS under the Kiloktet Wild and Scenic River Act of November 17, 1986. In a similar manner, the SI/2MNJ/4, Sec. 17 and SMJ/4NEJ/4 and NMJ/4SEJ/4, Sec. 18, T. 3 N, R. 13 E., are not Nashington beatment of Wildlife or Fisheries lands, but BIM lands to be managed by the USFS under the same Act. The NEI/4SEJ/4, Sec., 32, T. 4 N, R. 13 E., remains solely BIM-administered lands with management direction and resource allocations under the approved 1997 Spokane Resource Management Plan. This plan also provided land use allocations for the other 448 acres. The BIM Resource Management Plan (RMP) was completed using the Bureau planning procedures which included an within the river corridor that are managed by the Forest Service. The Native American/trust lands within the river corridor are patented private lands with no direct federal mineral leasing responsibilities. According to the official public land status records, on file with BLM in Portland, Oregon, there are five percels totalling 288 acres which are erroneously administered by the Forest Service will receive complete land use and resource allocations in the final river plan or the Forest Service will There are 448.17 acres of Bureau of Land Management (BIM) public lands environmental impact statement in a process comparable to USFS forest It is assumed that the 448.17 acres of BIM public lands adopt existing BIM decisions in the final plan. planning.

The final plan should also note how any federal lards or interests in lands which may be acquired under Alternatives 3 and 4 would be managed. This would remove any doubt about future management direction and allow the Forest Service to avoid plan amenthents for each acquisition. The Forest Service may want to secure jurisdiction by inclusion of the BLM public lands in the National Forest system. Public Law 99-663 did not accomplish this transfer.

53

Mineral Resources

minerals may be low or unknown, it should be discussed and the terms and conditions of any federal leases described. Given the sensitivity of resource values, it is recommended that the lands remain available for Although mineral potential for geothermal, oil and gas or other leasable mineral leasing with a no-surface-occupancy stipulation on all federal parcels. The federal lands are open to mineral entry (mining claim locations) and all forms of common material sales. However, mining claimants cannot receive title to the surface estate.

54

Land Use Management

Chapter 3 provides a good overview of state and local land use controls and regulations and this could be expanded to describe past and present federal management direction. The final plan should specifically address federal

plan should also describe vegetation management objectives for all federal lands so that incidental timber harvest and fire management plans, if any, can support river plan objectives. It may be appropriate to allow felling of dangerous snags and live trees which endanger river users or developments. Some timber may be useful for trail bridge or facility grants rights-of-way and temporary use permits, federal livestock grazing designations (such as existing or potential Research Natural Areas). The programs, wildlife and fish habitat management and opportunities for enhancement, cultural and historic resource protection and any binding cooperative agreements, memorandum of understanding or other special construction.

Outstanding Values

52

It is assumed that the full methodology and rationale for identifying outstandingly remarkable values (referred to on page 1-5) are available for public inspection and are consistent with comparable criteria being used in the region by federal agencies. If so, this should be noted to enhance analysis credibility.

99

Summary

52

comprehensive plan making or reaffirming all significant resource program directions. It is therefore recomended that a revised draft planyEIS be published with a clearly defined proposed actionymanagement plan to provide a complete and accurate analysis for public review and comment. We are concerned that the lack of a full management plan associated with a clearly identified proposed action limits effective public review opportunities. It is difficult to determine the full scope of direct and indirect impacts without knowing how existing and potential additional federal lands would be managed. In the absence of a forest-wide plan for these lands, it is assumed that the river plan will be the guiding

Again, thank you for the opportunity to comment.

Sincerely,

Johathan P. Deason Director

Office of Environmental Affairs

57

58

September 13. 1990

Area Manager Colompia River Gorge National Scenic Area Attn: Upper Kilokitat P.ver Study 902 Wasco. Suite 200

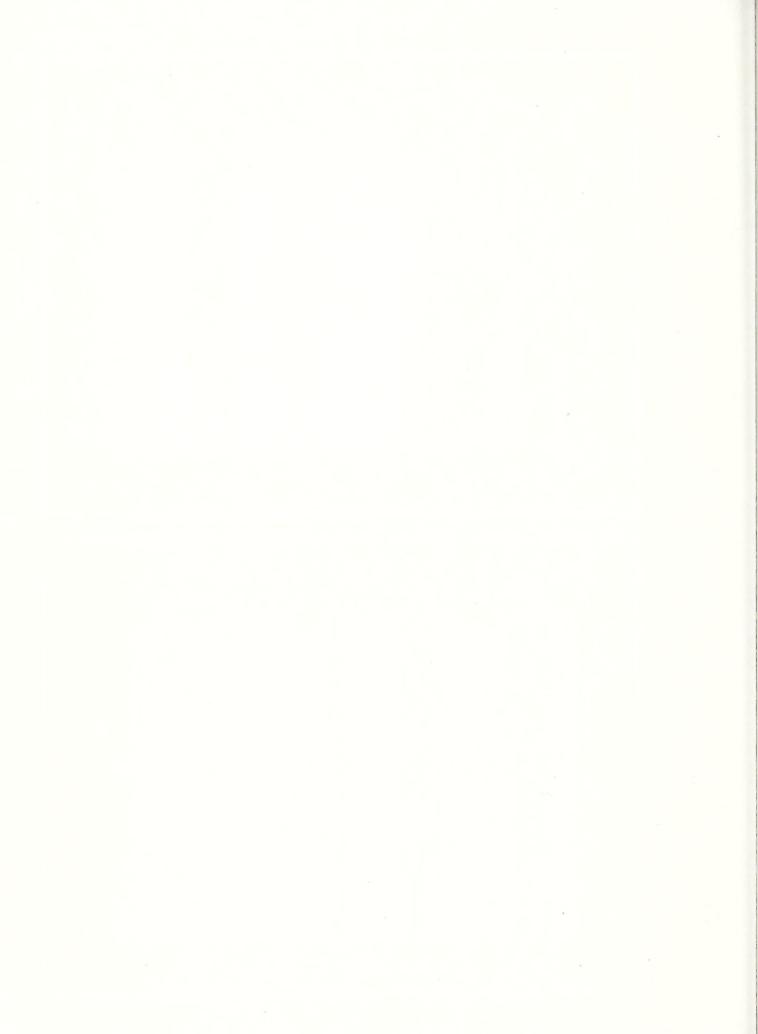
Gentlemen:

Hood Piver, Oregon 9703.

Thank you tot desponding to my request for a copy of the Dozet Environmental impact Statement on the Dozet Environmental impact of the province of the Dozet Environmental impact of the province of the Dozet Environmental impact of the province of the Dozet Environmental impact of t

i am the owner of approximate'y 4 acres of waterfront property (approximately 600 feet of water frontage) on the East bank of the lower Elickitat. This property is accessed by County road theorem County lano, and is evidently considered part of the "County Park" on Map 3-2 (2M 0.8 or RM 1). For several years I did lease my property to Kilickitat County and they did use it as a part of their "PARK". However, due to buoget constraints, they no longer park a lease fee and this property is not onger park". Exact description of this property is in the county records in Goldendaie.

I have reviewed your craft EIS and wish to make you aware that I favor either the leaving of things as they are falternative Mo. 170 or the outright purchase of private property by the Federal Government (Alternative Mo. 47) for a FAIR MARKET VALUE. I do not wish to be in the position of having to fight for property regists under the excessive regulation of bubbic booses open to making my property public while saddling me with the taxes and public liability for the Big de til Colo E. Izabeth Cole P. O. 30x 32864 Juneau, A.aska 00803 (907) 780 7236 Home (907) 465 2370 Work Sincerely. property.





APPENDIX B

Lower Klickitat River Management Plan



Rocky benches near RM 1 provide access for anglers and other recreation visitors.

Table of Contents

Introduction	. B - 3
Philosophy: Approach to Resource Protection	. В - 3
Administration	. B - 4
Designation	. B - 4
Interim Management	. B - 4
Boundary	. B - 5
Management Structure	. B - 5
State of Washington Management Role	. B - 6
Forest Service Management Role	. B - 6
Klickitat County Management Role	. B - 7
Yakima Indian Nation Management Role	. В - 7
Resource Goals, Management Direction, and Actions	. B - 8
Instream and Streambank Resources	. B - 8
Land-based Resources	. B - 11
Recreation Opportunities	. B - 13
Public Outroach and Landownor Assistance	B - 16

Introduction

This management plan describes how the Preferred Alternative (Alt. 2) described in the Final EIS will be implemented. The management plan is designed to be a stand-alone document. However, the Final EIS provides additional rationale behind Alternative 2, its development, and its effects on physical, social, and economic resources in the river corridor. The Final EIS also contains a map showing the boundaries and management areas.

The plan has three parts:

- The plan's philosophy—The general approach to resource management;
- 2. The plan's short-term and long-term administrative procedures—the management roles and responsibilities of Klickitat County, the State of Washington, the Yakima Indian Nation, the USDA Forest Service, and others who will be partners in river management.
- 3. A set of desired future conditions, resource-specific goals, the management direction developed to address these goals, and the actions needed to achieve them.

The management plan is directed to Klickitat County, the State of Washington, the Forest Service, residents of the river corridor, river users, and others who care about the future of the lower Klickitat, because all of these people will have to work together to achieve the goals of this plan. In their comments on the Draft EIS, the Klickitat County Commissioners and the State of Washington supported the goals of this plan and said they would undertake the necessary actions.

The plan implements the Preferred Alternative two different ways:

- It contains a set of actions that would begin right away, such as steps to institute a water quality and quantity monitoring program;
- It sets the direction and provides a framework for resolving management situations that arise in the future.

The management plan does not contain a prescription for every situation that could confront river managers. Instead, the plan's philosophy and goals provide a vision of the future for the lower Klickitat, a context for interpreting and acting on future events. The plan creates a specific mechanism (the Klickitat River Committee) for addressing these issues.

Philosophy: Approach to Resource Protection

The management plan is guided by the Wild and Scenic Rivers Act:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

By designating it as a member of the Wild and Scenic Rivers System in 1986, Congress decided that the lower Klickitat was to be one of these select rivers, undammed and with its water and resources intact. The EIS process was a way of deciding how best to fulfill the intent of the Act—out of the many possible ways the lower Klickitat could be protected and maintained for future generations, which way is the most appropriate? Factors considered include the character of the river corridor, the type of resources that exist (and likely threats to those resources), cost and administrative feasibility, public preferences, and other important issues and variables that define the social, physical, and managerial character of the lower Klickitat River.

To guide plan development, four broad goals specific to issues on the lower Klickitat were developed:

- To protect and seek opportunities to enhance outstandingly remarkable resources in the river corridor: the river's free-flowing character; resident and anadromous fish and their habitat; Native American dip-net fishing; and the geology of the lower gorge;
- 2. To maintain other valued resources and characteristics of the river corridor. These include resource values and opportunities such as water quality, scenery, vegetation and wildlife, as well as social and economic values such as the existing economy, rural lifestyle, and private property rights;
- To maintain the existing character of the river corridor, retaining the dynamic blend of open space, ranches, timber harvest and forest management, residential development, and natural areas, rather than freezing land use development where it is today.

4. To maintain the existing spectrum of recreational opportunities, improving existing sites and providing limited new access while minimizing the impacts of recreation to private lands and landowners.

These goals were used during the planning process to help identify and evaluate alternatives. This set of goals makes it clear that resource protection and local landowners' property rights and livelihoods are not separate issues, but always will be intertwined

This plan assumes that, for the most part, existing river resource protection mechanisms are adequate to protect river resources. If a resource value has been protected by existing management, and if existing management seems adequate to address reasonably expectable future sources of impact, then the existing mechanism is left alone. If existing mechanisms could be improved or made more efficient by better coordination or enforcement, then this is pursued. But new or stricter regulations, or purchases of land and easements, should be undertaken only when needed, not used as a primary management tool. The management plan does not pre-empt existing rights or management responsibilities. For example, Klickitat County will remain responsible for updating and implementing the Shorelines Master Plan; the State, along with the Yakima Indian Nation, will continue to manage fish and wildlife resources in the river corridor.

Most resource protection efforts will be accomplished by a three-tier approach.

- Tier 1. Protection relies on existing land use regulations and environmental quality measures, enhanced by greater levels of enforcement and coordination. This plan assumes that most of what's needed is already in place. Existing resource protection programs such as the Shorelines Master Plan are reviewed and updated regularly, increasing their ability to address resource issues as they arise.
- Tier 2. Existing resource protection mechanisms will be supplemented by an active program to provide funding and technical assistance to managing agencies and landowners to carry out their activities in ways compatible with river resource protection. The emphasis is on incentives, not increased regulations. However, each agency is committed to assuming its agreed-upon role to the extent possible even if the desired level of cooperative funding is not available.
- Tier 3. Purchase of easements or lands and/or land trades could be used on a limited basis to provide public access and to protect resources or opportunities that were not being adequately addressed by existing regulations or landowner assistance programs.

Acquisition is not anticipated to be a major tool in river management. A limited amount of land and easements could be purchased or traded to provide public access or to protect significant river-related values, but only in cases where existing laws, regulations, or policies are not able to achieve the goal in question.

Acquisition should be on a willing seller basis. The state will not use condemnation as a means to acquire easements or land. The Forest Service could use its condemnation authority in response to a clear and direct threat to a significant resource value and only after all other attempts to resolve the threat have failed.

A monitoring program will measure the effectiveness of resource protection actions and progress toward specific objectives. Conditions monitored will include water quality and quantity, recreational use and its impacts, cultural sites, and the scenery and character of the river corridor. For resources where better baseline data are needed—such as cultural sites, rare plants, and recreation—monitoring will be more intensive at first in order to establish baseline conditions. Specific monitoring actions are listed under the goals to which they apply.

Administration

This section describes the key administrative characteristics of the plan including designation, interim management procedures, boundaries, management structure, roles and responsibilities, and anticipated budgets.

Designation

To provide for state coordination of management of the lower Klickitat River, the State would add the Klickitat to the Washington State Scenic Rivers System. Until such time, the river would be managed by the USDA Forest Service as described below.

Interim Management

The interim management period is defined as lasting until the Klickitat River is added to the Washington State Scenic Rivers System and the Governor informs the Secretary of Agriculture that the state is prepared to take a leadership role in coordinating river management activities.

The USDA Forest Service will be the lead agency for interim management of the lower Klickitat. The Forest Service will be guided during this period by the direction and schedule described in this management plan. Boundaries under interim management will be the existing boundaries, which are in

effect until changed by Congress. One of the agency's activities will be to assist the state with its task of adding the Klickitat to the State Scenic Rivers System.

The Forest Service will prepare a charter to establish a Klickitat River Advisory Committee, a group similar to the EIS Task Force (and to the eventual Klickitat River Committee), to make recommendations on implementation. The Committee, which should include a broad range and balance of interests similar to the EIS Task Force, will meet regularly during the entire interim period, and make recommendations to the Forest Service. The Committee will be convened after approval of the management plan; its first actions will be to review this management plan.

In order to begin undertaking the direction contained in this plan, the Forest Service will develop a memorandum of understanding (MOU) with the State of Washington, Klickitat County, Yakima Indian Nation, and Bureau of Land Management. The MOU will provide the basis for the cooperation necessary to begin implementing the management plan.

Boundary

The boundaries of the Wild and Scenic River corridor encompass the area addressed by the provisions of this management plan. When the river is added to the State system, the Forest Service will request that Congress narrow the existing Wild and Scenic boundary to 1/4 mile from the ordinary high water mark on each side of the river, consistent with the State system. The exception to this would be that the boundary on the east side of the river within the Lyle urban area would be the 200' Shorelines Management Area.

For management purposes, the river is delineated as two areas, shorelines and uplands:

The <u>shorelines</u> area consists of the existing shorelines management area as defined by the Washington State Shorelines Management Act (200 feet back from the normal high water mark of each bank). This area will be the primary focus of river management.

The <u>uplands</u> area consists of the area between the shorelines area and the edge of the federal/state boundary, 1/4 mile out from the ordinary high water mark on each side of the river. Management in this area will rely primarily on ongoing landowner and county activities. Other than the actions specified in this plan, management activities in the uplands area will be initiated: (1) at the request of landowners; or (2) if the Klickitat River Committee agrees that action is needed to deal with a clear and direct threat to the river; or (3) if the Forest Service must act to redeem its legislated responsibility.

A clear and direct threat is defined as an existing or proposed action in the river corridor that the River Committee believes

would seriously hinder achievement of one or more of the goals as stated in this plan. The source of the threat, its impacts, and alternative ways of addressing the threat should be clearly documented before action is taken.

Management Structure

This plan will be implemented by a cooperative agreement between the State of Washington and the USDA Forest Service. When Congress added the lower Klickitat to the Wild and Scenic Rivers System, it gave management responsibility to the Secretary of Agriculture, who must see that the intent of the Act is met.

Section 10(e) of the Act encourages federal agencies charged with administration of Wild and Scenic rivers to involve states and their political subdivisions to cooperate in administration of Wild and Scenic river corridors that include or adjoin state or county lands, as is the case along the lower Klickitat. Federal agencies are authorized by the Act to enter into written cooperative agreements with Governors, agency heads, or county commissioners to administer the river.

The main mechanism for cooperative management will be a Memorandum of Understanding (MOU) among the Forest Service, BLM, State of Washington, Klickitat County, and the Yakima Indian Nation. This will specify the responsibilities and tasks to be accomplished by each entity, along with the product being produced. For example, The Forest Service and Klickitat County already have an agreement under which the Forest Service is providing the county with funding, to undertake activities (described under County Role) between October, 1991 and December 31, 1991.

The Washington State Scenic Rivers Program will take the lead in implementing the provisions of this plan after the river is added to the State Scenic Rivers System. As described under Forest Service Role below, the Forest Service will maintain an oversight role.

As called for by State law, the State Scenic Rivers Program will create a group called the Klickitat River Committee, which will include local citizens (including a representative from the town of Klickitat), river users, the forest industry, environmental interests, representatives from state and county government, the Yakima Indian Nation, and the Forest Service. Makeup of the Committee is expected to be similar to that of the study Task Force, as well as the advisory committee to be convened by the Forest Service during the interim management period. The committee is expected to operate on a consensus basis; its charter will more clearly define its decision processes.

The Committee does not usurp existing county, state or federal management authorities; its purpose is to provide a forum for plan participants to keep each other informed of ongoing activities and to make sure that the plan's goals are being met. A staff person (a Forest Service employee) will be provided to

the Klickitat River Committee. This person will also be involved in public contact, recreation management, landowner assistance, and coordination of activities among the various agencies and people on the Committee.

In addition to participating as members of the River Committee, four entities—Klickitat County, the State of Washington, the USDA Forest Service, and the Yakima Indian Nation—will play key roles in river management. These roles are summarized below.

State of Washington Management Role

The State will pursue legislation adding the lower Klickitat to the Washington State Scenic Rivers System. This is necessary before the state can assume its intended role in river management. The State's intent is to add not just the lower Klickitat, but the adjacent stretch up to Summit Creek, to the State System; this provides the opportunity to manage the entire river from Summit Creek to the mouth.

In his comment on the Draft EIS, the State Scenic Rivers Program Manager described the process for state designation of the lower Klickitat:

The procedure for state designation would begin with a formal request of the task force, county commissioners or legislators to the Commission. Adoption by the Commission would place the river in a bill request to the legislature. Passage of the bill is dependent on the approval of the legislature and governor.

This process will require additional public involvement, especially for landowners in the middle stretch of the Klickitat (from the Little Klickitat to Wheeler Canyon, near Pitt) that has not been studied. The State is expected to begin this public involvement process immediately.

The State Scenic Rivers Program is the lead management entity for the lower Klickitat, responsible for coordinating management activities. The State will appoint the chairperson of the River Committee, who will be responsible for scheduling, facilitating, providing minutes, and sharing costs of the Committee's meetings.

It is recognized that state designation could take some time. The administration outlined in this plan would not begin until the Klickitat is added to the State Scenic Rivers System and the State is ready to assume its coordinating role. Until that time, the Forest Service will be responsible for interim management activities, as described below.

Forest Service Management Role

As described under Inter im Management, the Forest Service will be responsible for implementing the plan direction until the State is ready to assume the lead role and the cooperative agreement is signed. After that happens, the Forest Service will play several key roles. The Forest Service also will be responsible for asking Congress to change the Wild and Scenic boundaries established for the lower Klickitat after state designation.

The Forest Service will be responsible for overseeing monitoring efforts, because these efforts will show how well the plan is working. When Congress designated the river, it made the Secretary of Agriculture responsible for making sure that resources within the river corridor would be protected. This responsibility remains even though the State would have the lead in coordinating the actions that take place under the plan.

As part of this oversight role, The Forest Service will conduct an annual review of plan implementation, using the results to modify, as needed, the Memoranda of Understanding with the county, state, Yakima Indian Nation, or other entities.

Another key Forest Service responsibility is to fund activities or to arrange for activities to be done by people or agencies with funds during the first 3 years of management plan implementation (or during the interim management period, whichever is longer). After this period, the state and federal government are anticipated to contribute or arrange for contribution of equal portions of needed funding.

The lower 1.4 miles of the Klickitat within the Wild and Scenic River corridor is included in the CRGNSA as a General Management Area (GMA), Because the Gorge Commission is responsible for implementing a plan addressing all GMA's along the Columbia, it makes sense for the Gorge Commission to take the lead in managing this portion of the lower Klickitat. However, the Forest Service will make sure that CRGNSA actions are consistent with Wild and Scenic River management and that the Gorge Commission is aware of management actions to be taken under Wild and Scenic River management.

The Final Draft Management Plan for the CRGNSA, issued July, 1991, designated most of the river corridor as Open Space. The exceptions are the town of Lyle, the county park near RM1 (designated as Public Recreation), and a Small Woodland area.

The goal of GMA open space is to:

protect those most significant and sensitive scenic, cultural, natural and from conflicting uses and enhance them where appropriate (CRGNSA plan, p. 1-48).

The Final Draft of the CRGNSA plan refers to the Open Space lands along the Klickitat as the Klickitat River Wildlife and Natural Area. Uses that may be authorized include low-intensity recreation, wildlife management activities educational or scientific research, and other uses allowed in all lands designated Open Space.¹ Only those uses and development authorized in the CRGNSA management plan maybe undertaken on Open Space lands. Uses may be authorized on private land designated Open Space only with landowner permission.

The Gorge Commission works with owners of Open Space lands to develop a stewardship program which protects resources while achieving landowner objectives. The Commission establishes priorities for acquisition or exchange of lands whose owners object to the Open Space designation, and improved lands are not designated Open Space.

The Forest Service also will coordinate management of federal lands in the corridor. The corridor contains approximately 450 acres of public lands managed as "scattered tracts" under the existing BLM Spokane Area Resource Management Plan. These will continue to be managed under existing provisions, provided that proposed actions are consistent with protection of Wild and Scenic values. The Forest Service will keep the River Committee informed of any proposed or planned activities scheduled for federal lands within or adjacent the boundary, and will seek additional opportunities to enhance river-related resources. The Forest Service and BLM may determine that this could best be accomplished through an MOU or transfer of these lands to the Forest Service.

Klickitat County Management Role

The county's primary role is to assure enforcement of the existing provisions of the Shorelines Master Plan, floodplains regulations, the zoning ordinance, and other local land use regulations to make sure that existing regulations are working to their potential. The county also is anticipated to be active in the state designation effort, given its strong support for this management alternative.

Applications for variances and conditional uses will be scrutinized more carefully to make sure that proposed projects do not adversely affect river values and are consistent with this plan. Downzoning and granting variances or conditional uses within the boundaries is inconsistent with river management goals, unless impacts to river resources or characteristics would be reduced by the proposed activity. The River Committee would review and make recommendations regarding these activities.

Through a cooperative agreement with the Forest Service, the county will increase enforcement and landowner outreach efforts, making sure people are aware of existing regulations and the rationale behind them. Working on-the-ground with landowners in a non-adversary relationship, the county will be in a better position to ensure that its existing laws are having the intended effect, and to work with landowners to find new mutually-agreeable ways of protecting river resources without new regulations or restrictions.

In September, 1991, the Forest Service and Klickitat County signed an agreement under which the county will begin to undertake certain river management activities with Forest Service funding. This agreement calls for the county to hire a new full-time position with the title Resource Recreation Planner." Activities specified include monitoring land and enforcing ordinances, writing a steep-slope development ordinance, working on a search and rescue plan, and working with the State to inform and encourage the support of residents of the middle Klickitat River prior to developing a strategy for getting the Klickitat River added to The State Scenic Rivers System.

Yakima Indian Nation Management Role

The Yakima Indian Nation's interest in the Klickitat River, which originates on the Yakima Indian Reservation, stems from many sources, including long-term use of the river and its resources and existing treaty rights and privileges and management authorities. The plan envisions the Yakimas as critical partners in administration of the lower Klickitat River.

The Yakima Indian Nation will coordinate river management with ongoing efforts to enhance anadromous fish resources under the Northwest Power Planning Council's Klickitat Subbasin Plan. This involves keeping the Committee informed and seeking opportunities for the Committee to assist with sub-basin planning activities.

In addition, the Yakima Indian Nation will provide technical assistance to help the Forest Service to conduct the inventory of cultural sites within the corridor and develop plans to protect significant sites identified. Another key role will be to develop a site plan, with assistance from the Forest Service, for protecting the lower gorge and Native American dip-net fishing opportunities.

^{1.} These other uses include: land divisions to facilitate resource protection; repair, operation and improvement of existion serviceable structures; and removal of timber, rocks, or other materials for public safety.

Desired Future Conditions, Resource Goals, Management Direction, and Actions

This section lists desired future conditions, the goals of the management plan, the management directions adopted to meet these goals, and the actions that need to be taken.

The Desired Future Condition statements describe, in broad terms, the conditions in the river corridor that the management plan is designed to achieve. In most cases, these are descriptions of the existing conditions. The River Committee and the entities represented on it will use these statements as guidelines to make judgements about the appropriateness of activities in the river corridor. The Goal statements break down the desired future conditions into more-specific subareas, which the Management Direction statements describe in greater detail, identifying key management measures that are already in place, as well as providing a context for new actions that are needed to meet the goals. The Actions are a list of new activities needed to meet the goals.

The agency or entity is identified that will be expected to take each action, although most actions will require cooperation among several groups or interests represented on the River Committee. A schedule describes when the actions will be initiated. The Forest Service maintains the responsibility to see that all critical management activies are taken until agreements that state otherwise are completed.

The goals are organized into categories by resource area or primary focus: instream and streambank resources; land-based resources; recreation opportunities; and public outreach and landowner assistance. These categories are not meant to be independent; actions listed under one goal may help to meet another.

Instream and Streambank Resources

Desired Future Condition. The lower Klickitat is a freeflowing river, with no new bridges, dams, diversions, or other instream structures for flood control or water supply. The river is bordered by a narrow strip of land where natural processes are allowed to continue.

Existing diversion works or structures are maintained but the waterway remains generally natural in appearance. No new

riprap is added unless approved. If new bank stabilization measures are approved, the use of natural materials and bioengineering techniques maintains the river's existing character. If state and county highways within the corridor are improved to provide for the safety of highway users or to enhance the values of river resources, low-impact construction methods and natural or natural- appearing materials are used. An active floodplain is part of the free-flowing process, so new residential and non-residential structures are located or constructed to allow the river to flow unimpeded.

The river's free-flowing character is enhanced by hydroseeding and planting appropriate vegetation such as willows on riprapped shoreline areas; Riprap that could be removed is identified, as are opportunities to enhance existing reprap both structurally and visually. On privately-owned shorelands, these activities take place only with the consent and participation of the landowner. Opportunities are sought to involve public volunteers in enhancing the river's free-flowing qualities.

The lower gorge continues to be used by Native Americans for dip-net fishing activities; fishing platforms are repaired, replaced, or added as they are needed. Any improvements to the existing fish passage facility either enhance river resources or reduce the potential for negative impacts.

The streamflow consists of high-quality water suitable for fish populations and habitat, wildlife, recreation, irrigation, and municipal uses. The water is safe for contact water activities. Sources of pollution are identified and removed in the mainstem and in upstream tributaries known to be sources of sediments and/or pollutants, including the Little Klickitat River and Big Muddy Creek. Citizens, especially students in local schools, are involved in the monitoring process. As a result of these actions, the state no longer considers water quality in the lower Klickitat to be "threatened." Septic tanks, drainfields, and similar structures are located and function to protect water quality.

The river continues to contain a sufficient quantity of water to support thriving populations of anadromous and resident fish and to allow year-round floating use. Existing water rights are not affected by any new river management activities.

The presence of adequate amounts of high quality water, coupled with other efforts to maintain fish habitat and populations, enable the river to support thriving populations of anadromous and resident fish. Salmon and steelhead runs are enhanced through implementation of the Columbia Basin System Plan by state and federal agencies, the Northwest Power Planning Council, and the Yakima Indian Nation.

Goal 1: Maintain the river's free-flowing character

Management Direction. The Wild and Scenic Rivers Act and implementing guidelines and standards specify that free-

flowing character must be maintained by prohibiting new dams, diversions, and other instream structures for flood control or water supply. The Act defines free-flowing as

Existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: Provided, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

Section 7 of the Act directs departments and agencies of the United States to not recommend authorization of any water resources project that would have a direct and adverse effect on significant river resource values.

On the lower Klickitat, this means that existing diversion structures may be maintained provided the waterway remains generally natural in appearance. Existing riprap may be repaired provided that the net impact to free-flowing character is not increased. New riprap is not consistent with maintaining existing free-flowing character. However, new circumstances, such as a road washing out or the river changing course substantially as a result of flooding or other catastrophic events, may require an analysis to determine if bank stabilization will be allowed.

The Forest Service Pacific Northwest Regional Office currently is developing a framework for analyzing proposed water resources projects affecting Wild and Scenic rivers. This process, developed in draft form in May, 1991, provides river managers with a systematic way to evaluate the appropriateness of water resource projects. Factors evaluated include: the purpose and extent of the proposed activity; its effects on channel geometry, gradient, streamside vegetation, and biological processes; changes in surface and subsurface flows; and potential off-site impacts. When finalized, the framework will be used by the Forest Service and River Committee in their evaluations of proposed projects.

Bank alterations that would have a negative impact on the river or river values, including construction of new bridges, are not consistent with maintaining the existing character of the river. Exception could be maintenance necessary to protect public health or safety. For these, low impact construction methods and use of natural or natural appearing materials are required. State and county highways within the corridor could be improved to provide for the safety of highway users or to enhance the values of river resources as long as there is no further impact on free flow.

Improvements to the existing fish passage facility may be consistent with the intent of the Act to the extent that these

enhance or reduce the potential for negative impacts to river resources. Activities related to the practice of traditional Native American dip-net fishing—such as repair, replacement, or addition of fishing platforms—are not affected.

A primary mechanism for enforcement will be the existing state process. Administered by the Washington Department of Wildlife (WDW), a hydraulics project approval (HPA) is required for any work that will "use, divert, obstruct or change the natural flow or bed" of all state waters. The code applies to all work to be performed below the ordinary high water line. However, approval may be denied only based on impacts to fish and habitat.

Actions:

1. Coordinate with federal agencies to make sure they are aware of dam prohibitions on the lower Klickitat, and inform the River Committee of any proposed or potential actions which could affect free-flowing character. As part of this, make determination of impacts of proposed development to free-flowing character, based on River Committee discussion and the Forest Service framework.

Primary responsibility: USDA Forest Service

Schedule: Begin in 1991

- 2. Keep the Klickitat River Committee informed about requests for hydraulic permits and other applications for activities that could affect the river's free-flowing character.
- 3. Develop and carry out shoreline enhancement measures including planting appropriate vegetation on rip-rapped shoreline areas. Actions may include planting willows, hydroseeding, or identifying riprap that could be removed. On privately-owned shorelands above the ordinary high water mark, conduct these activities with the consent and participation of the landowner. Seek opportunities to involve public volunteers.

Primary responsibility: Washington Department of

Fisheries

Schedule: Develop Shoreline Enhancement Fund procedures during 1991;

begin improvements in 1992.

Goal 2: Maintain a non-degradation policy for water quality

Management Direction. The Wild and Scenic Rivers Act specifies that a primary goal is to protect the water quality of rivers in the System, to ensure the presence of high-quality water suitable for fish populations and habitat, wildlife, recreation, irrigation, and municipal uses. The state of

Washington, as guided by the Water Pollution Control Act and the Water Resources Act of 1971, has a policy that no surface water degradation be allowed on National Wild and Scenic rivers.

The county already has several regulations in place that help to maintain water quality and provide for public health and safety. Septic tanks are located at least 50 feet from a watercourse and drainfields set back at least 100 feet. Drainfields are not permitted in areas with unsuitable soils. The lowest level of new residential construction must be above the base flood (100-year) level, and new non-residential construction is flood-proofed below the base flood level. New residential construction is prohibited in the floodway.

Existing water quality monitoring is not adequate to characterize water quality or to detect and identify impacts to water quality. This is especially important given that the State of Washington, although rating existing flows as excellent (class A), considers water quality in the lower Klickitat to be "threatened." Once the monitoring program begins, identified sources of pollution would be addressed under State policies and procedures.

Actions:

1. Establish a water quality monitoring program to measure baseline conditions and allow detection of changes that could violate non-degradation standards.

Monitor water quality parameters as described by state law in the mainstem where it enters and leaves the Wild and Scenic section, as well as water contributed by upstream tributaries that are known or suspected to be sources of sediments and/or pollutants, including the Little Klickitat River and Big Muddy Creek. Explore a means to involve local citizens in monitoring, with priority given to a program that would involve local schools.

2. Identify the source(s) of water pollution and work to resolve the problem through existing State of Washington procedures. Keep the River Committee informed and, if needed, develop a plan within the Committee's three-tier procedure to resolve the problem and maintain water quality.

Primary responsibility: Washington Department of

Ecology

Schedule: Begin monitoring by 1992

Goal 3: Maintain adequate flow levels in the river to protect and allow the potential to enhance identified resource values

Management Direction. Designation creates the responsibility of maintaining and enhancing identified resource values; on

the lower Klickitat, many of these values depend on adequate streamflow. However, the Wild and Scenic Rivers Act states:

The jurisdiction of the States over waters of any stream included in a national wild, scenic, or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

Water quantity is monitored systematically only at the town of Pitt near the upper end of the Wild and Scenic segment. The Klickitat River currently is not overappropriated, and the subbasin plan states that existing flow levels in the Klickitat do not constitute a barrier to fishery enhancement. However, improved water quantity monitoring procedures are needed, as is an evaluation of the flows necessary to maintain and enhance Outstanding values. After completing this evaluation, the State will work within existing laws and policies to establish minimum instream flows, provided that existing water rights are not affected.

Actions:

- 1. Monitor water quantity near the mouth of the Klickitat, as well as at the existing station near Pitt.
- 2. Identify instream flow requirements for fish, recreation, and other river values. Apply for instream flow reservations based on the amount of water needed to sustain these values.

Primary responsibility: Washington Department of

Ecology

Schedule: Begin monitoring in 1991; finish

instream flow studies by 1993

Goal 4: Maintain and enhance resident and anadromous fish habitat and populations

Management Direction. The Columbia Basin System Plan being developed and implemented by state and federal agencies, the Northwest Power Planning Council, and the Yakima Indian Nation is designed to enhance salmon and steelhead runs in the Klickitat River (and other rivers in the Columbia watershed).

The lower Klickitat management program, including the new efforts to maintain water quality and quantity, will benefit anadromous fish. It would be unnecessary and unwise to develop a separate fisheries plan given the amount of effort already being expended to that end. Instead, the focus will be on coordinating the river management plan with the Sub-Basin Plan. The River Committee also will seek opportunities to assist in implementing Sub-Basin objectives.

Actions:

- 1. Keep both the River Committee and Sub-basin planners informed of progress in plan implementation.
- 2. Present opportunities for cooperation to the River Committee. Work with the State of Washington to make sure fish populations are being adequately monitored so that morespecific objectives can be developed.

Primary responsibility: Yakima Indian Nation

Schedule: Begin during 1991

Land-based Resources

Desired Future Condition. The riverscape is composed of cultural as well as natural features and patterns and contains permanent developments such as Highway 142, which parallels much of the river. The historic farm and ranch buildings and operations, as well as the primitive canyon switchback roads, contribute to the cultural landscape.

The existing character of the Shorelines and Upland management areas is maintained. New development, although evident, is visually subordinate to the characteristic landscape. Except for the upper mile of the river corridor and the area within and adjacent Lyle, the corridor consists mostly of open areas.

Residential development occupies roughly three percent of the river corridor, consisting primarily of four clusters of structures built on mildly sloping benches above the 100-year floodplain (these clusters are located at Lyle, Pitt, RM 7 to RM 7.6, and RM 8.6 to RM 9). New residential development takes place near existing structures. New homes are set back from the river and are reasonably spread out to retain the rural character of the river valley.

On public and private lands within the river corridor, thriving stands of Oregon white oak (<u>Quercus garryana</u>) are present that provide habitat for a variety of wildlife. Significant cultural and historical sites, rare plants, and rare plant communities continue to exist, free from development and the potential for inadvertent damage.

The river corridor continues to support land use activities present in 1991, expanded or enhanced as permitted by existing laws and the intent of this plan. The steep slopes that form the river valley do not contain roads or development that were not present in 1991. The evidence of timber harvest in the corridor is minimal, and virtually non-existent very close to the river's edge. Within the Shorelines area, agriculture consists of practices such as non-intensive grazing and there is no commercial development.

Goal 5: Maintain the existing character of the Shorelines Management Area.

Management Direction. The area within 200' of the ordinary high water mark on either side of the river is a primary management area under this plan. The existing character of this area will be maintained. The Visual Quality Objective is Partial Retention, meaning that new activities or developments must be visually subordinate to the existing landscape. A moderate amount of new residential development is compatible with this goal, especially if it occurs near existing development and blends with the existing color, line, form, and texture of the landscape.

In most cases, the Shorelines Act and existing county zoning provides an adequate level of protection, provided it is adequately enforced and that existing standards are not lowered. Most of the lower Klickitat shoreline falls in the Conservancy Environment, which is characterized by very low intensity land uses primarily related to natural resource use, minor capital investment and relatively major biophysical limitations. Its objective is to balance sustained yield natural resource utilization with low density recreational uses.

Within a Conservancy Environment, residential development is allowed, but must be set back a minimum of 100 feet from the river, and only one residence is allowed per 660 feet of river frontage (this frontage requirement applies only to new land divisions). Agriculture is limited to practices such as non-intensive grazing and commercial development is prohibited. Timber harvest is limited to 30 percent of the merchantable stems every 10 years, except within 50 feet of the ordinary high water mark, in which a one-time cut of 30 percent of the stems is allowed, and no timber harvest thereafter.

If the River Committee believes that proposed activity allowed by local land use laws would unacceptably affect river resources, it would work within its three-tier framework to resolve the problem.

Actions:

1. Assure enforcement of existing Shorelines regulations and other applicable ordinances and work with landowners within the Shorelines area to achieve resource protection goals.

Primary responsibility: Klickitat County

Schedule: Begin enforcement and

coordination activities during

1991.

2. Explore the feasibility of purchasing available lots in the Steelhead Run subdivision, or of working with landowners to provide adequate screening of new structures.

- 3. Purchase a limited amount of lands or easements as needed during the first 3 years of management. The Advisory Committee (or River Committee) would make recommendations to the Forest Service for acquisition. Provide technical assistance to the state in applying for Land and Water Conservation Fund money.
- 4. Monitor the character of the river corridor by establishing a series of photographic and video viewpoints showing levels of development in river character from key viewpoints at recreation sites and along highway 142. Prepare set of photographs and videos depicting baseline conditions from which to measure effects of new development. Visual monitoring should include not just Shorelines area but the upslope area described under Goal 6.

Primary responsibility: USDA Forest Service

Schedule: Begin activities during 1991

Goal 6: Maintain the character of canyon hillsides and reduce the potential for impacts from hillside development

Management Direction. The steep slopes along much of the Klickitat River canyon are areas susceptible to several types of impacts which, in turn, could affect river resources. Erosion and runoff from development activities on steep slopes could threaten water quality. Road construction and related activities on steep slopes, particularly open areas within the river canyon, would be highly visible from the river and other viewing points within the Wild and Scenic corridor. To meet the intent of the Wild and Scenic Rivers Act, the canyon slopes should retain their visual and physical integrity (the corresponding VQO is Partial Retention).

County zoning regulations already in place work to maintain the existing character and the desired future condition. In most of the corridor, new single-family dwellings are subject to a 20-acre minimum lot size. Within the upper mile of the segment, openness and the rural character of the countryside is maintained and new single-family homes are subject to a 2-acre minimum lot size. The area surrounding but not including the community of Lyle remains rural in character, with new single-family homes having a 5-acre minimum lot size. The unincorporated town of Lyle provides an area for higher density residential development. In addition, timber harvest potential is limited within the river corridor, and most harvest activities require a Forest Practices Permit.

Actions:

1. Establish a Klickitat County zoning ordinance prohibiting construction of roads on slopes greater than 40% on areas within the canyon rims.

Primary responsibility: Klickitat County Board of

Commissioners

Schedule: Pass ordinance by 1992

Goal 7: Identify and conserve rare plant species and communities in the river corridor.

Management Direction. The Final EIS identified 15 rare plant species that may be present in the river corridor. Field work is needed to see whether these (and other) rare plant species actually are present in the lower Klickitat River corridor. Based on the results of the field studies, site plans will be developed to protect identified species or communities.

Actions:

- 1. Conduct an inventory of rare plants that includes an evaluation of the existing level of protection for any rare plant species identified. Make recommendations for any additional actions to maintain or increase the existing level of protection.
- 2. The River Committee will discuss the results and work within its three-tier framework to make sure that rare plant species are protected.

Primary responsibility: USDA Forest Service

Schedule: Begin inventory by 1992; begin

protection actions by 1993

Goal 8: Develop and implement a program to identify and conserve significant stands of Oregon white oak.

Management Direction. This goal was an important component of the Task Force's consensus on this plan. The Washington Department of Wildlife currently is developing a statewide oak plan. Oak conservation strategies also have been developed by Columbia Gorge Audubon and California's Placer County. The River Committee needs to support the state's planning effort as well as develop a plan specific to the lower Klickitat River corridor.

Actions:

1. Inventory and identify significant oak stands in the river corridor. Assess existing level of protection and make recommendations to the Klickitat River Committee for actions that could be undertaken within the three-tier management framework.

2. Work with landowners to encourage oak conservation on a voluntary basis, using a pamphlet such as "Living Among the Oaks," developed by the University of California.

Primary responsibility: Washington Department of

Wildlife

Schedule: Conduct inventory by 1992 and

begin implementation of plan in

1993

Goal 9: Identify and protect important cultural and historic sites located within the river corridor

Management Direction. The lower gorge dip-net fishing area was found to be an outstandingly remarkable resource value. Actions taken under other objectives will help to protect the physical and biological components of this use—the gorge, the fish, and the dip-net platforms. The need for additional measures will be assessed by the River Committee as part of its ongoing management activities.

Other important cultural or historical sites may exist along the river; a more-detailed archival and anecdotal inventory is needed to identify and determine the significance of additional sites. Private lands will be surveyed only if permission is granted by the landowner. Based on the outcome of this inventory and recommendations for management of any sites, the River Committee will act within its three-tier framework to protect significant sites. Identified sites will be monitored to prevent inadvertent or willful damage. In addition, an ethnographic survey will be conducted within the lower Klickitat corridor.

Actions:

- 1. Inventory cultural sites within the river corridor, including field reconnaissance of potential significant sites. Evaluate the sites' potential for nomination to the National Register.
- 2. Evaluate the existing level of protection for the site(s) and identify measures that could be taken to increase protection.
- 3. Conduct ethnographic survey.
- 4. Work with landowners to develop a strategy for protecting dip-net fishing sites and practices.
- 5. Develop a conservation plan describing the actions to be taken.

Primary responsibility: USDA Forest Service and Yakima

Indian Nation

Schedule:

Conduct inventory and ethnographic survey in 1991-1992; begin implementation of conservation plan in 1993.

Recreation Opportunities

Desired Future Condition. The lower Klickitat corridor provides a variety of Roaded Natural recreation opportunities in an environment free of litter and refuse. Popular activities are fishing from shore and boat, boating, picnicking, camping, driving for pleasure, and fishing from a motorboat (in the pool extending about one mile upstream from the Columbia).

The corridor's recreational setting is characterized by a generally natural environment with moderate evidence of the sights and sounds of people. Resource modification and utilization practices are evident, but harmonize with the natural environment. Concentration of users is low to moderate with facilities sometimes provided for group activity.

There are about equal opportunities for affiliation with other user groups and for isolation from sights and sounds of man, and an opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills is important. Opportunities for both motorized and non-motorized recreation are present, but the river upstream from RM 1 is not used by motorized watercraft.

The number of recreational access sites is the same as the number present in 1990, although public access is now guaranteed at a few sites formerly used only by permission of private landowners. These landowners no longer have the responsibility of dealing with trespass, litter, liability issues, and other impacts of recreational use.

Rustic facilities exist primarily for safety and resource protection, and secondarily for user convenience and comfort. There is a diversity of recreation facilities to meet the varied skills and interests of people with disabilities.

Outfitters and guides operating under Forest Service special use permits are available to provide high quality services such as fishing and floating opportunities to the public.

Recreational use in the lower gorge area does not conflict with Native American dip-net fishing. There are opportunities to view and learn more about Native American dip-net fishing activities, carefully designed to avoid any conflicts with those activities.

Onsite controls and restrictions are limited to those necessary for user health, safety, and maintenance of Roaded Natural opportunities. The river is patrolled regularly by a Forest Service employee, who meets and talks to recreation visitors, letting them know about river management policies and giving them the chance to evaluate recreation conditions on an informal basis. Floaters are informed about the hazards of the lower gorge; when accidents do occur on or along the river, search and rescue operations are swift and efficient.

The number of visitors using the corridor is not limited unless monitoring suggests that unacceptable impacts to social or physical resources are occurring or are likely to occur soon, and then only after less restrictive measures, including visitor education, have failed to address the problem.

Burlington Northern's railroad line along the lower river continues to serve its existing function. If BN ceases this use, the right-of-way is either maintained as open space or to provide recreation consistent with Roaded Natural opportunities. Compatible uses include a tourist train, bike path, or hiking trail; incompatible uses include a paved road open to vehicle traffic, or a corridor of residential or commercial development.

General Management Direction

The actions to be taken to maintain and enhance recreational opportunities are grouped into five sets of goals: administration; site acquisition and improvement; monitoring; guides and outfitters (commercial use); and health and safety. As described above, the river corridor will be managed to provide Roaded Natural opportunities under the Recreation Opportunity Spectrum (ROS).

During the planning process, the Task Force and others expressed concern at the possibility that rampant development and publicity that could accompany Wild and Scenic designation would increase recreational use of the river, particularly fishing and floating use. Task Force members agreed that the priority should be on maintaining existing opportunities and providing only a limited number of site improvements. These goals are consistent with the county's Public Access Report prepared as part of the Shorelines Master Plan.

The River Committee will monitor changes in land use activities or ownership that could alter existing recreational opportunities, such as the status of Burlington Northern's railroad line along the lower river. If new opportunities develop, the Committee will attempt to ensure that they were consistent with recreation management and resource protection goals. Recreational use of the gorge area will be monitored to make sure that it is not affecting Native American dip-net fishing. If conflicts occur, the higher priority will be given to maintaining dip-net fishing and use of the gorge area by Native Americans, rather than to recreational use by the public.

Goal 10: Establish an on-the-ground recreation management presence

Management Direction. An on-the-ground presence is needed to regularly meet and talk to recreation visitors and landowners, letting them know about river management policies, and giving them the chance to evaluate river corridor conditions on an informal basis. The primary intent is to contact visitors in a friendly, helpful manner.

Actions:

1. Provide for the River Committee staff person to patrol the river and public access sites (by boat and road) on a regular basis, at least once per week. This is in addition to his or her other duties, to be specified in the Committee charter developed by the Forest Service.

Primary responsibility: USDA Forest Service

Schedule: Begin during 1991

Goal 11: Provide public access and facilities appropriate for Roaded Natural opportunities

Management Direction. Several existing needs for access or facilities were identified in the Draft EIS, based on Task Force and public comments. Of these, acquisition of several key access sites is the highest priority, followed by improvements needed for public health and safety. Acquisition of sites will not only improve public access but will decrease the impacts of recreational use on private lands.

Actions:

- 1. Obtain legal access to sites located on private lands at RM .08, RM 5.5 and RM 8.1 (method is acquisition of lands from willing sellers).
- 2. Provide a limited number of additional signs and interpretive facilities at two county parks and WDW site; topics will include how to deal with accidents and emergencies, and respect for tribal and private lands.
- 3. Provide sanitation facilities, designated parking areas, and erosion control measures at both county parks, and at newly-acquired access points.
- 4. Provide a primitive (unpaved) launch/takeout suitable for non-motorized craft at the county park located at RM 10.2.
- 5. Improve camping opportunities at the WDW site at RM 4.9.

- 6. Improve the trail to the river for fishing at RM 1 (trail difficulty should be Difficult (Challenge Level 1) instead of the existing More Difficult level.
- 7. Work with Washington Department of Transportation to provide limited improvements at two roadside pullouts between RM 1 and 3.5, to provide views of the lower gorge and permit unobtrusive viewing of dip-net anglers.
- 8. Provide technical assistance to the county and state to apply for funding for recreational development that the Forest Service cannot legally fund.
- 9. Work with county to draft ordinance prohibiting motorized watercraft upstream from RM 1.

Primary responsibility: USDA Forest Service

Schedule: Pursue site acquisition during

1991; develop site plans for new and existing sites during 1992 and

1993.

Goal 12. Establish a program to monitor recreational use patterns, impacts, and visitor preferences

Management Direction. There is little evidence of resource damage from recreation, conflicts among users, crowding, or other problems occurring on more heavily used rivers. However, recreation managers need to monitor recreational use and its effects to make sure that the existing Roaded Natural opportunities continue to be provided. Many of the actions taken under other goals will help to maintain recreation opportunities. But information on use patterns and the characteristics and preferences of recreation visitors is needed before specifying additional management actions (if any) to meet recreation management goals. A program is needed to monitor social, physical, and biological conditions and how recreational use is affecting these conditions. Standards cannot be developed without adequate baseline data on existing use patterns and resource conditions.

Components of the study will include installation of traffic counters at existing recreation sites and a physical inventory of recreation site conditions (both at formal and informal access sites). In addition, a year-round survey of recreation visitors will be conducted to supplement informal observations and visitor contact by the river ranger.

If the studies conducted as part of the monitoring process suggest that recreational use is adversely affecting river corridor resources or recreational opportunities, indirect (soft) measures (such as visitor education) will be used to accomplish protection goals. This will avoid limiting use levels or enacting regulations which would unnecessarily restrict visitor freedom. If these

indirect measures are not successful, alternatives such as regulations on the type or level of recreational use allowed along the river would be implemented.

Actions:

- 1. Conduct a year-round survey of recreational users. The survey will be designed to collect several types of information: use patterns (such as activity participation, timing and frequency of use, location of use); visitor characteristics (such as place of residence); and perceptions of the Klickitat (such as desired experiences, management preferences, conflicts or problems; and how the Klickitat compares to other rivers in the region).
- 2. Measure use levels and patterns by establishing a system to install (and calibrate) car counters at public access sites.
- 3. Based on the initial year of monitoring, use the Limits of Acceptable Change (LAC) process to develop more accurate indicators and standards that allow precise measurement of progress toward recreation management objectives. Use the River Committee (or a subgroup) as a sounding board for the LAC process.

Primary responsibility: USDA Forest Service

Schedule: Begin monitoring and yearlong

visitor survey in summer, 1991

Goal 13: Manage commercial recreational use in a manner consistent with Forest Service policy

Management Direction. USDA Forest Service policy requires management of commercial recreation uses on Wild and Scenic rivers. The permit system for outfitters will be the existing system instituted by the Forest Service in 1990. Limits on the number of outfitters are not needed at this time; results of the monitoring effort will suggest when, if ever, such limits are appropriate.

Actions:

- 1. Continue existing permit system for outfitters and evaluate annually.
- 2. Establish no additional requirements or regulations on commercial floating or fishing pending a minimum of one full season of monitoring social and physical conditions. Involve River Committee in developing any regulations.

Primary responsibility: USDA Forest Service

Schedule: Continue on current schedule.

Goal 14: Provide for the health and safety of recreation visitors and resource users

Management Direction. Concern for the safety of recreation visitors and Native American dip-net anglers was voiced by many people throughout the river management planning process. Improvements in training, signs, and rescue coordination could reduce the risk of encountering hazards such as the fierce whitewater in the lower gorge.

Klickitat County strongly favored limiting motorized boating to the pool section upstream from the Columbia in its comments on the Draft EIS, and no comments were received that suggested providing or increasing access for motorized boats. Motorized boating above this section appears to be restricted by intermittent rapids and low flow levels.

Actions:

- 1. Develop a search and rescue plan for the river.
- 2. Provide technical assistance for training the sheriff's search and rescue personnel and the Native American search and rescue team. Coordinate the activities of these groups. Remove trees and debris that fall in the river if a hazard is posed to floaters, providing that this does not seriously impede free-flowing processes and fish needs.
- 3. Make boaters aware of the lower gorge by placing signs at Turkey Farm access and near the head of the gorge.
- 4. Establish a regular litter pickup patrol and an annual river cleanup program to keep the river shorelines and highway and railroad rights-of-way clean, while involving local residents and river users in a mutually beneficial activity.
- 5. Prohibit on-river motorized use above gorge.

Primary responsibility: USDA Forest Service and

Klickitat county

Schedule: Begin activities immediately

Public Outreach and Landowner Assistance

Desired Future Condition. The public, especially landowners within and adjacent the river corridor, are aware of river management activities. Efforts are made to inform people about the benefits of river management, and how they can take advantage of management programs.

Landowners are informed about opportunities to conserve resources that also improve the efficiency or cost-effectiveness of their own activities. A voluntary easement donation program encourages landowners to conserve resources on their lands while providing them with tax and other benefits. Landowners

are compensated at fair market value for any easements or acquisitions in fee simple.

Local publics know and appreciate the fact that the river is part of a national system. All contacts with the public and landowners are sensitive to the impacts of the National Scenic Area Act, Wild and Scenic designation, and other measures that can affect private property rights. Local hostility over designation and federal involvement in river management decreases over time as people understand what river management does and does not constitute.

Goal 15: Continue to inform and involve landowners in river management, seeking opportunities to provide technical assistance to landowners to manage their lands in a manner consistent with river management goals

Management Direction. Throughout the river management planning process, landowners have expressed concern over Wild and Scenic designation, typically fearing that federal involvement in river management would mean that their private property rights would be taken away. This plan does not give reality to those fears; purchase of lands would be very limited to retain existing ownership patterns. If any lands or easements were purchased, the landowners would be compensated at fair market value. Narrowing the boundaries, establishing the two-level management (concentrating most activities in the existing Shorelines Management Area), having the state take the lead in managing the lower Klickitat, and having landowner representation on the River Committee were all measures designed in response to comments on the Draft EIS.

Nonetheless, many landowners are still skeptical, and continue to ask "What's in this for us, other than increased regulations?" Because this management plan relies on cooperation with landowners to accomplish many of its goals, it's important to let landowners know about the plan and what it will or will not do. While this does not ensure their support for river management, it's a necessary first step before other actions can be taken. Because the county is the governmental entity closest to local residents, its involvement is critical.

Actions:

1. Write a handbook for landowners, describing existing land use regulations, sources of technical assistance and funding (including the shoreline enhancement fund), and who to contact for more information. The handbook, modeled after similar documents, will provide landowners with tips on ways of managing their lands that have the dual benefit of conserving river resources while saving landowners time and money. The tone will be educational and helpful, rather than authoritative

or regulative. Landowners representatives on the River Committee will provide their perspective on what information would benefit other landowners.

- 2. Upon landowners' request, add areas containing any significant plant communities, wildlife habitat, or rare plant areas to the existing Current Use Tax Program. Encourage non-profit organizations to assist in conserving these areas.
- 3. Work with non-profit conservation groups to establish a conservation easement program, informing landowners of potential benefits and encouraging voluntary donations.

Primary responsibility: Klickitat County and USDA

Forest Service

Schedule: Develop landowner manual and

set up conservation program by

1992.

Goal 16: Continue to inform and involve the public in river management activities

Management Direction. It is essential to keep the public informed and involved in river management. Many interests will be represented on the River Committee, serving as one link to the public. Additional public outreach is needed to make sure that landowners, river users, and other people who care about the river have the opportunity to comment on the plan's implementation.

Actions:

- 1. Publish a newsletter at least twice a year, mailed to all people on the existing mailing list (which will be reviewed to make sure all people who own land within the corridor and the state and national river organizations are included), to keep people informed about implementation of the river management plan.
- 2. Hold public meetings or workshops as needed or upon request.

Primary responsibility: Washington State Scenic Rivers

Program

Schedule: Issue first newsletter and hold

public meeting(s) by Fall, 1991

Summary of River Management Roles and Responsibilities

USDA Forest Service

Provide 100 percent of the funding for activities during first 3 years of river management (unless otherwise specified); provide approximately 50 percent of the necessary funding thereafter.

Prepare MOUs with agencies and others as needed, to implement the plan.

Be responsible for interim management activities, including provision of river manager and development of Advisory Committee.

Work with the Department of Agriculture to request that Congress change the boundaries after the river is included in the State system and provide federal funding for the management plan.

Develop a charter for and Appoint a representative to the Klickitat River Committee.

Make sure that federal licenses and permits will not be granted for dams or other instream development that would have an adverse effect on the natural character of the river.

Continue to manage BLM lands in corridor and keep river committee informed of any impending actions that could affect river resources.

Coordinate river management plan with CRGNSA management plan.

Take the lead in conducting inventories of rare plant species.

Take the lead in implementing recreation management provisions.

State of Washington

Conduct public meeting in town of Klickitat to involve "middle Klickitat" residents, and and introduce legislation adding the Klickitat to the State Scenic Rivers System.

At the end of the interim management period, take a leadership role in developing and guiding the Klickitat River Committee

B-1B Appendix B

and management plan implementation efforts, including updating the plan every three years.

Appoint representative(s) to Klickitat River Committee.

Provide 50 percent of the funding needed to implement the management plan after the first three years of management (or at the end of the Interim Management period, if it lasts for morethan three years).

Make sure that state licenses and permits will not be granted for dams or other instream development that would have an adverse effect on the natural character of the river.

Take the lead in implementing public contact programs.

Give due consideration to the river's state and federal designations when granting water quality certifications.

Conduct water quality monitoring and achieve non-degradation standards.

Conduct water quantity monitoring and head effort to develop and obtain instream flow requirements.

Administer Shorelines Enhancement Fund.

Develop and implement oak conservation plan.

Klickitat County

Appoint representative to Klickitat River Committee.

Enact county zoning ordinance to prohibit new roads on steep (over 40 percent) slopes between the canyon rims.

Increase enforcement of local land use regulations.

Agree not to downzone or grant variances for activities that the Klickitat River Committee believes would adversely affect river values.

Pass ordinance not allowing motorized watercraft upstream from RM 1.

Work with Forest Service on landowner outreach activities.

Work with the State to involve residents of the middle Klickitat in river management and in the State designation strategy.

Yakima Indian Nation

Appoint representative to Klickitat River Committee.

Make sure that river management actions are consistent with treaty rights, privileges, and management authorities of the Yakima Indian Nation.

Coordinate river management with ongoing efforts to enhance anadromous fish resources under the Northwest Power Planning Council's Klickitat Sub-basin Plan.

Conduct inventory of cultural sites within the corridor and develop plans to protect significant sites identified.

Develop site plan for protecting the lower gorge and Native American dip-net fishing opportunities.

Summary of Mangement Actions, Responsibilities, Schedule, and Estimated Costs¹

Goal #	al # Action	Entity Responsible ²	Schedule and Estimated Cost ³				
			FY 1991	FY 1992	FY 1993	FY 1994	
1	Coordinate with federal agencies to insure river remains free-flowing	Forest Service	_4	-	-	-	
	Inform River Committee about hydraulic project approval requests	Washington Dept. of Fisheries	-	-	-	-	
	Enhance shorelines	Washington Dept. of Fisheries	-	5,000	10,000	10,000	
2	Establish water quality monitoring program	Washington Dept. of Ecology	5,000	15,000	15,000	15,000	
	Identify and correct pollution problems	Washington Dept. of Ecology	-	_	-	-	
3	Establish water quantity monitoring program	Washington Dept. of Ecology	5,000	5,000	5,000	5,000	
	Identify instream flow requirements for fish, recreation, and other values	Washington Dept. of Ecology	5,000	10,000	10,000	5,000	
	Apply for instream flows as needed	Washington Dept. of Ecology	-	-	-	-	
4	Keep River Committee and Sub-basin planners informed and seek opportunities for cooperation on fish enhancement	Yakima Indian Nation	-	-	-	-	
5	Increase enforcement of Shorelines plan and work cooperatively with landowners	Klickitat County	5,000	15,000	15,000	15,000	

¹Estimates do not include Forest Service administrative costs for the interim management period, estimated to be \$105,000 if the interim period lasts for three years. Included in this amount is the existing contract with Klickitat County, for \$37,500.

²In most cases, goals will be accomplished through a Memorandum of Understanding between the Forest Service and the other agency or Tribe.

³Unless otherwise noted, Forest Service is assumed to provide all funding for initial three years of river management. Once the river is added to the state system, the state will share costs.

⁴A dash indicates that expenses are included as part of the overall administrative effort, so additional funding to accomplish the task is not required.

	Explore feasibilty of purchasing available lots at Steelhead run or work with landowners to minimize visual impacts of development	Forest Service	-	-	-	-
	Provide funding pool for land or easement purchase as recommended by River Committee	Forest Service	-	100,000	200,000	200,000
6	Establish zoning ordinance prohibiting construction of roads on slopes greater than 40 percent within the river canyon	Klickitat County Commissioners	-	-	-	-
7	Inventory rare plant species and communities	Forest Service	-	20,000	20,000	-
	Develop and implement site plans for species identified	Forest Service	-	-	10,000	10,000
8	Inventory oak stands and develop conservation strategy	Washington Dept. of Wildlife		10,000	10,000	15,000
9	Inventory cultural sites	Forest Service and Yakima Indian Nation	-	10,000	5,000	-
	Conduct ethnographic survey	Forest Service and Yakima Indian Nation	-	5,000	5,000	-
	Develop and implement cultural site management program for sites identified	Forest Service and Yakima Indian Nation	_	-	5,000	10,000
10	Patrol river and access sites regularly	Forest Service	-	-	-	-
11	Obtain legal access to 3 recreation sites and provide limited improvements at other existing sites	Forest Service	20,000	20,000	100,000	37,000
12	Collect information on recreational use	Forest Service	10,000	25,000	17,500	17,500
13	Continue managing commercial uses	Forest Service	-	-	-	-
14	Provide training and assistance to sheriff and Native American search and rescue teams	Forest Service	5,000	5,000	-	-
	Place signs alerting boaters to lower gorge	Forest Service	-	-	-	-
	Establish annual litter pickup program	Forest Service	-	-	-	-
15	Write and distribute handbook to landowners	Klickitat County and Forest Service	-	10,000	10,000	-

	Add areas (as requested) to Current Use Tax Program	Klickitat County	-	-	-	-
	Develop easement donation program	Klickitat County and Forest Service	-	5,000	10,000	5,000
16	Publish newsletter and hold meetings and workshops	Washington State Scenic Rivers Program	5,000	5,000	5,000	**
Total Estimated Budget:			60,000	265,000	452,500	339,500





UMBIA RIVER GORGE NATIONAL SCENIC AREA
902 WASCO AVENUE, SUITE 200
HOOD RVER, OREGON 97031
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

U.S. DEPARTMENT OF AGRICULTURE

U.S. FOREST SERVICE

FIRST CLASS MAIL
POSTAGE AND FEES
PAID

USDA PERMIT No. G-40